

**Request to amend Orders of Conditions for
Forge Pond / Lake Matawanakee drawdowns
to include the use of
Physical Removal of Plants
to manage invasive plant growth**

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

June 2023

**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. While this method has been modestly successful, Friends of Forge Pond, Littleton Clean Lakes Committee and Westford Healthy Lakes and Ponds Collaborative are requesting to amend the Order of Conditions for the drawdowns, to also allow the use of physical harvesting of plants as an additional method of controlling invasive plant growth in areas that are too deep to be affected by drawdowns or at times when recent drawdowns have been less effective.

Overview

Recent plant growth

Forge Pond / Lake Matawanakee, located in Westford and Littleton, MA 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*).

The most recent aquatic vegetation monitoring survey of Forge Pond / Lake Matawanakee was performed by TRC in late July 2022. The plants identified in this survey are shown in Table 1. The areal extent and density of the invasive species identified in this survey are shown in Figures 1 to 6.

Current plant management

Friends of Forge Pond (FOFP), Littleton Clean Lakes Committee, and Westford Healthy Lakes and Pond Collaborative have been active in trying to control invasive plant growth in Lake Matawanakee / Forge Pond. Various available methods to manage invasive plants in the lake have been considered. These include winter drawdowns of the lake levels, physical removal of the plants by manual or mechanical harvesting, the use of benthic mats, and chemical herbicide treatments. Chemical treatments can have adverse environmental consequences and FOPP believes that avoiding chemical treatments is advisable. Until recently, physical removal of the plants was seen as not being feasible.

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 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 these 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.

The drawdowns have been moderately successful in achieving that goal, but invasive plant growth continues to be an issue in many areas. During the most recent drawdown, the 2022-2023 winter had very mild temperatures, with no interval of below-freezing temperatures lasting longer than two days and the lake never froze over completely. As a result, there was likely little reduction of invasive plants in the exposed lakebed. 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 are expected to be more extensive than usual. Invasive plants are also extending across the lake surface in areas where they aren't normally present. When plants extend away from the shore into areas travelled by boats, propellers will create plant fragments, further propagating the invasive plants.

As the effects of climate change continue to be felt, the experience of the past winter may become more common and additional methods for controlling invasive aquatic plants may become important.

Physical removal of plants

We request augmenting the drawdowns on Forge Pond / Lake Matawanakee with physical removal of plants as an additional means of managing invasive plants in the lake.

Physical removal of plants or “Harvesting” is a recognized method of aquatic plant control [GEIR (2004) and Practical Guide (2004)] which includes the following techniques:

- Hand pulling
- Suction harvesting
- Cutting without collection
- Mechanical harvesting with collection
- Rototilling
- Hydroraking

This list of techniques is intended to be comprehensive, so if other techniques for physical removal of plants are available, it is intended that they would be included in this request.

Currently, there are no plans to use all of these techniques. Only a type of *mechanical harvesting with collection* is currently planned to be used. This is Eco-Harvesting and it is discussed below. However, the generic method of physical removal of plants, with all of the various techniques, is being requested here to simplify the approval process for other techniques, if some of them are seen to be appropriate at a later time.

If more specifics about a physical plant removal technique other than Eco-Harvesting need to be provided before such a technique is used at a later date, it would be appropriate to include this requirement in the Order of Conditions.

The perimeter of the area in which physical removal of plants would be carried out is shown by the blue line around the shore of the lake in Figure 7. There are no endangered species present in this area [NHESP Estimated Habitats of Rare Wildlife (2022)].

Eco-Harvesting

The technique of Eco-Harvesting uses a floating pontoon-boat-like vessel to collect plant material from the surface and near-surface of the lake (Figure 8). The plants are collected using a rotating drum at the front of the vessel, intended to pull the plants from the lake bottom rather than cut or break the plant stems. It is possible that very long or fragile plant stems will be broken. A conveyor belt moves the plant material into a containment hopper in the vessel. To keep plant fragments from drifting away from the vessel and spreading into the lake, (1) the plant material is pinched tightly between the counter-rotating drum and conveyor belt, (2) walls at the sides of the conveyor belt keep the fragments on the belt until they are placed in the hopper, and (3) the hopper walls securely keep the plant matter in the vessel. When the hopper is full, it is unloaded to a trailer on the shore, by reversing the conveyor belt (Figure 9). The plant material is trailered away from the site.

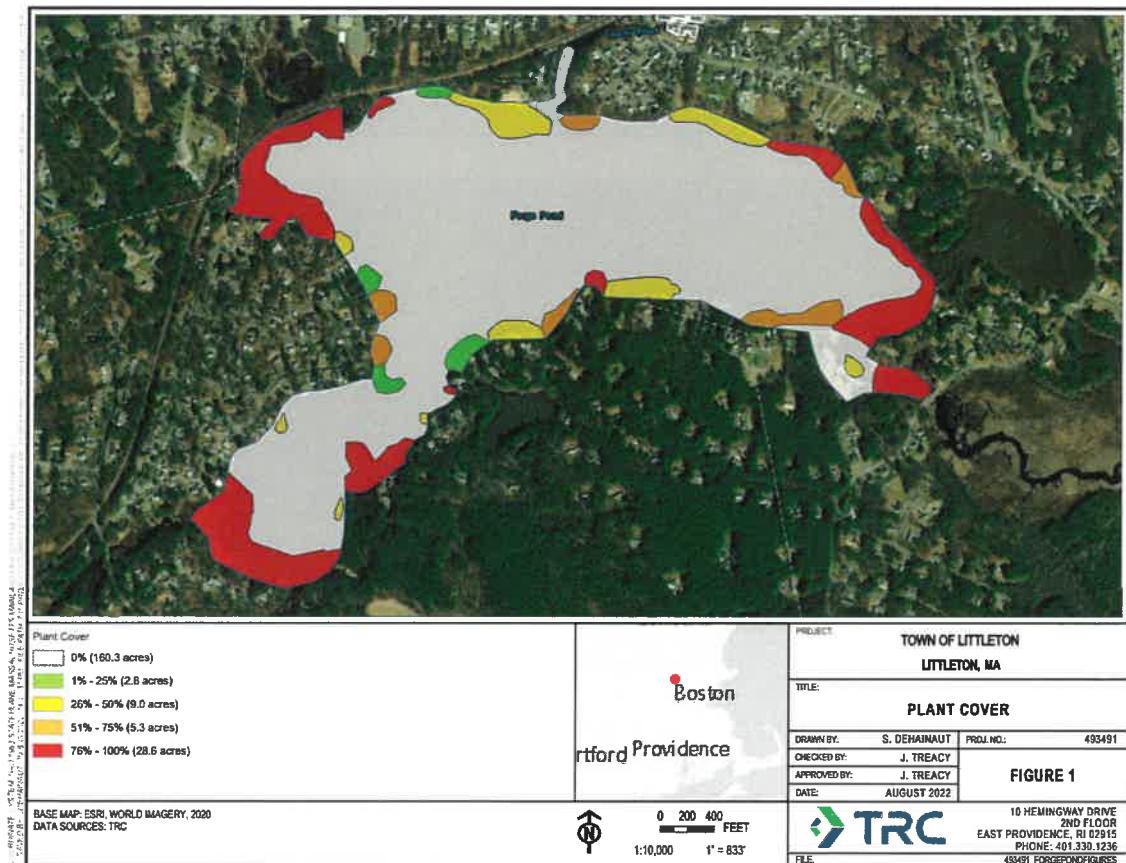
For the summer of 2023, we plan to remove invasive plants on Forge Pond / Lake Matawanakee using an Eco-Harvesting vessel for two days – one day in the Littleton part of the lake and one day in the Westford part of the lake. The areas to be managed will be confirmed from site observations prior to treatment, but based on last year's plant survey and existing conditions, it is expected that:

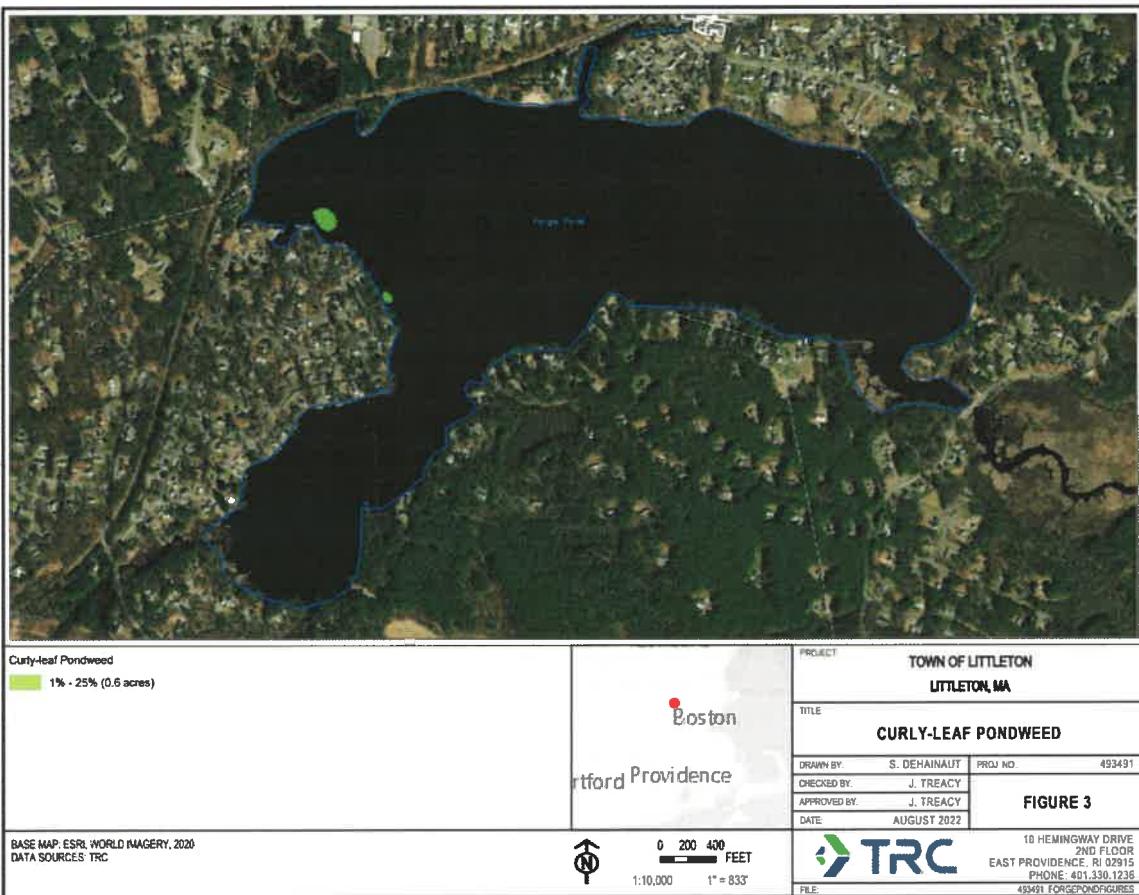
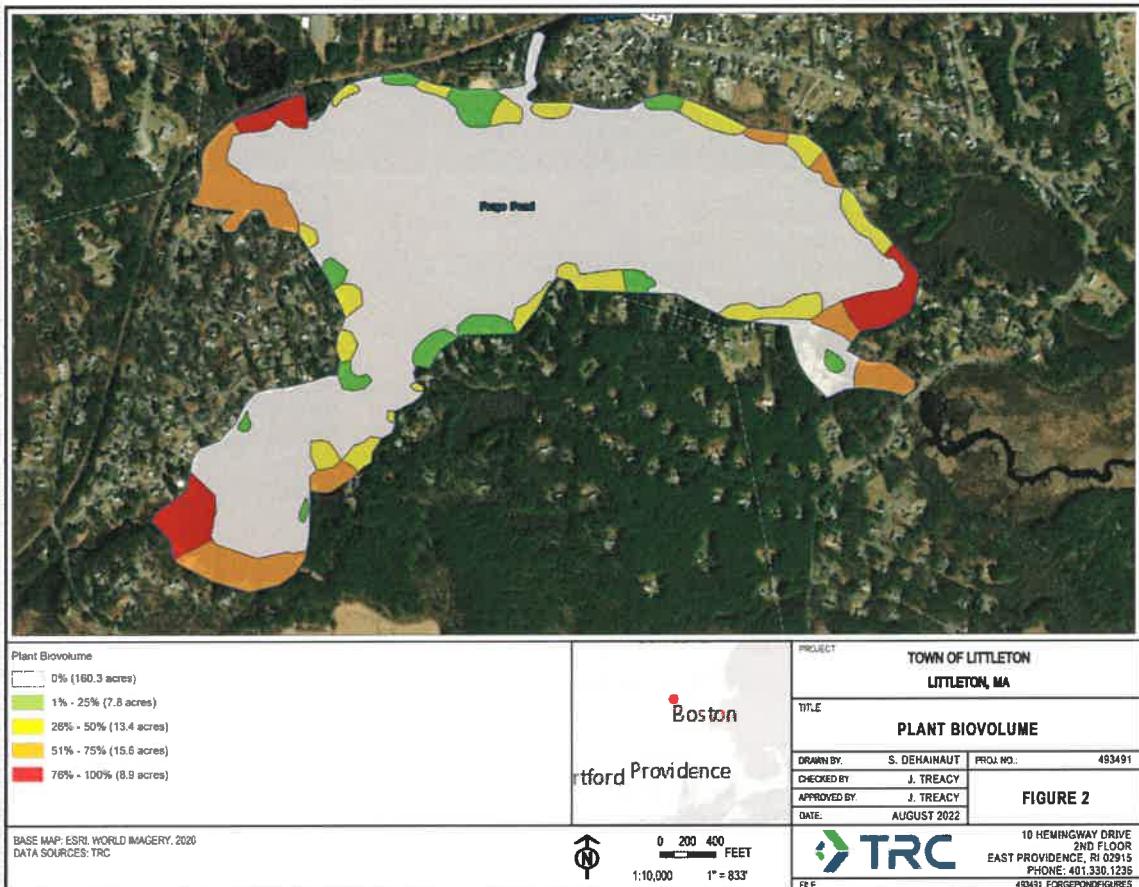
- The Littleton portion of the work will remove fanwort and Eurasian milfoil from the southwest end of the south bay and the west end of the lake.
- The Westford portion of the work will remove Eurasian milfoil at the east end of the lake. The extent of the milfoil growth in this area this year is already much higher than the 2022 survey results show.
- If more time is available for either the Westford or Littleton parts of the lake, other areas of high-density invasive plant growth will be managed.

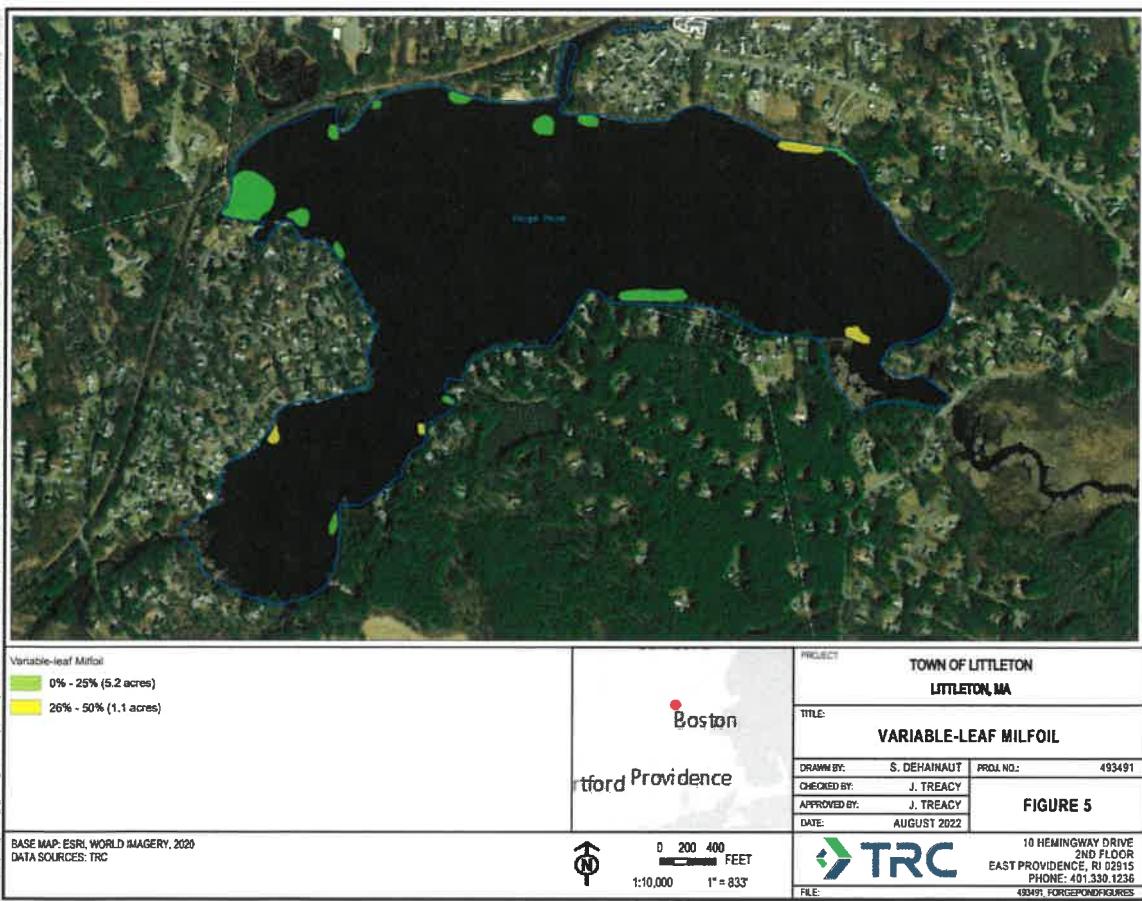
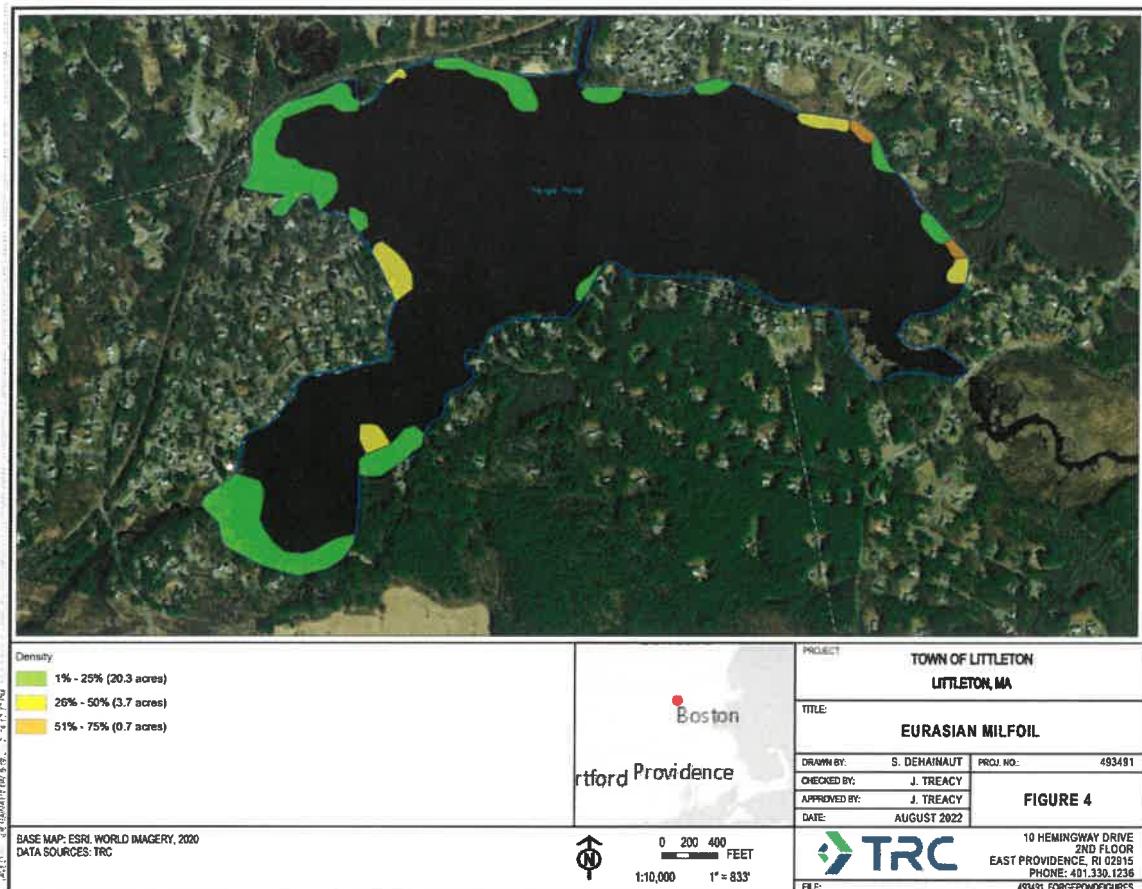
The Eco-Harvesting in the summer of 2023 will be performed by C&D Underwater Maintenance, New Milford, CT (see <https://cdseaweed.com/eco-harvester/> and <https://cdseaweed.com/service-areas/>). The Eco-Harvesting system will be put into the lake and removed from the lake using the Lake Matawanakee Association boat ramp on Matawanakee Trail. The vendor will be responsible for the disposition of the plant material after it is removed from the lake. For instance, at some sites, they have engaged with third parties to have the plant material turned into compost.

Table 1. Aquatic Plants Observed at Forge Pond during 2022 Annual Monitoring Survey.

Common Name	Scientific Name	Native or Exotic
Bushy Naiad	<i>Najas flexilis</i>	Native
Canadian Pondweed	<i>Elodea canadensis</i>	Native
Coontail	<i>Ceratophyllum demersum</i>	Native
Common Bladderwort	<i>Utricularia macrorhiza</i>	Native
Curly-leaf Pondweed	<i>Potamogeton crispus</i>	Exotic
Eurasian Milfoil	<i>Myriophyllum spicatum</i>	Exotic
Fanwort	<i>Cabomba caroliniana</i>	Exotic
Robbins' Pondweed	<i>Potamogeton robbinsii</i>	Native
Thinleaf Pondweed	<i>Potamogeton pusillus</i>	Native
Variable-leaf Milfoil	<i>Myriophyllum heterophyllum</i>	Exotic
Water Celery (Tapegrass)	<i>Vallisneria americana</i>	Native
White Water Lily	<i>Nymphaea odorata</i>	Native
Yellow Water Lily	<i>Nuphar lutea variegata</i>	Native







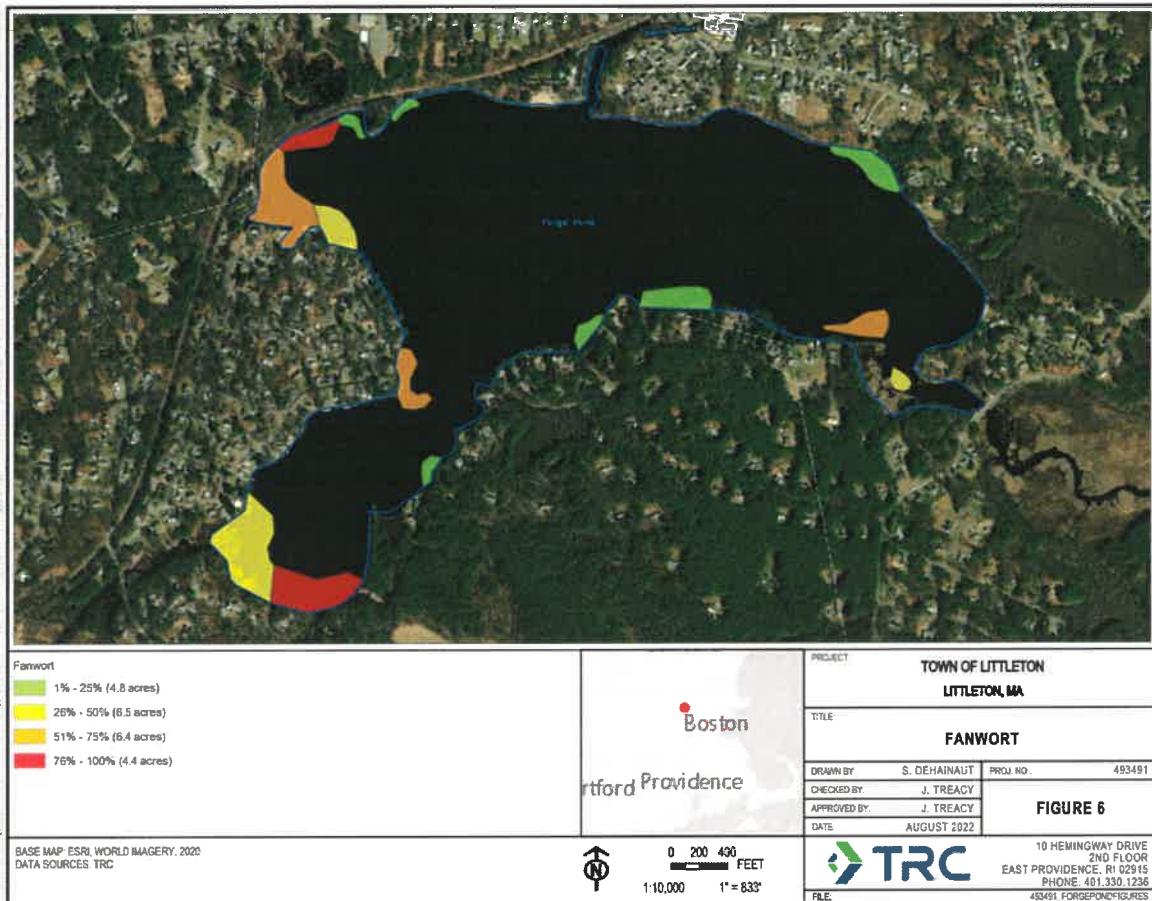




Figure 7 – Lake perimeter (outlined in blue) within which physical harvesting of plants in Forge Pond / Lake Matawanakee would be performed. The specific areas to be harvested in each season would depend on where invasive and nuisance plants are present in high density.



Figure 8 – Eco-Harvester system, showing overall vessel, rotating drum at the front, and conveyor belt carrying harvested plant material into the containment hopper.



Figure 9 – Emptying the Eco-Harvester system using the conveyor belt to unload harvested plant material from the containment hopper into a trailer for removal.

References

GEIR (2004) -- Generic Environmental Impact Report on Eutrophication and Aquatic Plant Management in Massachusetts. Executive Office of Environmental Affairs, Commonwealth of Massachusetts. pp. 4-29 to 4-44

Internet link to this reference:

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

Practical Guide (2004) -- The Practical Guide to Lake Management in Massachusetts. Executive Office of Environmental Affairs, Commonwealth of Massachusetts. [Companion to GEIR (2004)] pp. 102 – 110

Internet link to this reference:

<https://www.mass.gov/doc/the-practical-guide-to-lake-management-in-massachusetts/download>

NHESP Estimated Habitats of Rare Wildlife (2022)

Natural Heritage and Endangered Species Program, Massachusetts Division of Fisheries and Wildlife. Estimated Habitats of Rare Wildlife last modified: December 9, 2022

Internet link to this reference:

<https://massgis.maps.arcgis.com/home/webmap/viewer.html?layers=e99c0aae177247ae85636102db6ede5f>



Littleton Conservation Commission

37 Shattuck Street / Room 303

Phone: 978 540-2428

Fax: 978 952-2321

Filing Procedure Summary Submit this checklist with application (rev December 20, 2021)

The following procedures must be followed when filing under M.G.L. c. 131, §40 or the Littleton Wetlands Protection, Chapter 171 for a wetland permit. The procedure applies to Notice of Intents, Abbreviated Notice of Intents, Request for Determinations, and Abbreviated Notice of Resource Area Determinations.

This summary is not to be considered all inclusive and in no way should an applicant misconstrue its contents to replace any part of M.G.L. c. 131, §40 or the Littleton Wetlands Protection, Chapter 171.

(1) one electronic file of complete submittal emailed to the Conservation Agent and 2 hard copies (with full sized, color plans) filed with the Conservation Commission hand delivered or mailed and received in the office before noon of filing deadline. Additional copies may be required of some projects. Please call ahead to determine meeting dates and filing deadlines.

(1) one complete copy of the application must be filed with Department of Environmental Protection at:
Department of Environmental Protection
8 New Bond Street
Worcester, Massachusetts 01608

During COVID Emergency Provisions, MADEP also requires an electronic file sent to
[CERO NOI@mass.gov](mailto:CERO_NOI@mass.gov) (underscore between CERO and NOI)
With the Subject line based on this format "LITTLETON -xxx-STREET ADDRESS -
APPLICANT NAME. The "xxx" will be NOI, ANRAD or RDA

The applicant must include a certified list of abutters (including those in adjacent Towns) located within 100 feet of the property boundaries, according to the most recent records of the Town Assessors, or as determined by MADEP policy on abutter notification. If a Town line is within 300 feet of the Limit of Work, then that Town's Conservation Commission must also be notified.

The applicant, at the applicant's expense, shall post to each abutter (and owner if owner is not applicant) by Certificated Mail (Return Receipt Requested), or by hand delivery with signature of abutter a copy of the Abutter Notification Form. An Affidavit of Service of such notification shall also be provided. Abutters' signed acknowledgement of notification (ie, green Return Receipt cards) shall be provide at the first public meeting/hearing. See the Littleton Conservation Commission website for the Abutter Notification Form or call the Agent.

PROJECT NAME/ADDRESS: Amend drawdown OOC to include plant removal

/ Lake Matawanakee -- Forge Pond

DATE: June 26, 2023

At the applicant's expense, the 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	<u>David Barr</u>
Company (if applicable)	<u>Friends of Forge Pond</u>
Mailing Address	<u>P.O. Box 327, Littleton MA 01460</u>
E-mail	<u>barrdt@gmail.com</u>
Phone	<u>978-201-9524</u>

Filing fees for MADEP and Town of Littleton under the MA Wetlands Protection Act regulations, as well as the Littleton Wetlands Protection ByLaw filing fee.

PROJECT NAME/ADDRESS: Amend drawdown OOC to include plant removal
/ Lake Matawanakee -- Forge Pond

DATE: June 26, 2023

Plans Checklist to accompany application for Notice of Intent (NOI). This is a Bylaw Supplemental form to aid you in submitting complete and appropriate information on your plans. These are suggested/expected items to be shown on the plans but will not necessarily be applicable to all projects. Note that the Commission generally requires a colored plan for presentation purposes.

All lines must be marked X or identified as Not Applicable ("N/A"), or noted as to where the information can be found.

(1) North arrow Locus insert Bar scale (preferably 1 in = 20 to 40 ft.)

(2) Title Block with Following Information:

Plan Title

Applicant's Name(s), address & phone

Property Owner Name(s), address & phone

Location/street name & number

Assessor map, lot, Registry book, page on all lots w/activity

Plan preparer's name, title, stamp, company name, address phone & fax

Date plan prepared, last revised, and revision notes

(3) Existing contours

(4) Existing structure(s) with natural and man-made features, including stone walls and trails

(5) Trees over 8-inch diameter breast height within resource areas and buffer zones

(6) Property lines; clearly mark limits of review area if entire property is not under review

(7) Existing utilities, rights-of-way, easements, ancient ways or other deeded ways

(8) Name of wetland scientist responsible for identifying wetland boundaries

(9) Date wetland was flagged (must be no more than 3 years prior to current date)

(10) Wetland resource area boundaries with flag numbers

(11) 100 foot buffer zone limits and 50-foot No Disturb limit

(12) Notations identifying all wetland types and delineation methodology

(13) Shortest distance to all resource areas from closest proposed structure (use arrow)

PROJECT NAME/ADDRESS: _____ DATE: _____

- (14) _____ Shortest distance to all resource areas from closest point of erosion control materials
- (15) _____ Proposed contours (one foot increments)
- (16) _____ Proposed location of utility lines
- (17) _____ Proposed structure(s) (including driveway work, septic components, etc)
- (18) _____ Existing and proposed stormwater management features (including temporary controls)
- (19) _____ Watersheds and drainage areas
- (20) _____ Test pit, boring holes and logs
- (21) _____ Conservation post detail and plaque detail
- (22) _____ Location of temporary stockpiles w/notation of content (e.g. excavated soils)
- (23) _____ Location of snow storage areas
- (24) _____ Location of dumpster(s)
- (25) _____ Cross-sections, particularly at key areas of slopes near wetland resource areas
- (26) _____ Mitigation plans as needed
- (27) _____ Construction sequencing
- (28) _____ Details as applicable, including type of erosion controls

PROJECT NAME/ADDRESS: _____ DATE: _____

One full sized color plans (and presentation plan) should be colored as follows.

Check if present	Feature	Line Type
	Existing tree line	Green solid
	Proposed tree line	Green dashed
	Bordering Vegetated Wetlands*	Dark blue solid
	Bank/Land Under Water	Light blue dashed
	100 foot buffer from BVW and/or Bank	Yellow solid
	50 foot No Disturb limit from BVW and/or Bank	Yellow dashed
	Vernal Pool	Purple solid
	Vernal Pool 100 foot	Purple dashed
	Bordering Lands Subject to Flooding	Orange solid
	Isolated Lands Subject to Flooding	Orange dashed
	Mean Annual High Water	Light red solid
	100 foot and 200 foot Riverfront Area	Light red dashed
	Bank, Wetland, Land Under Water, Riverfront Area and Floodplain	Red solid with differentiated stippling/cross hatching
	Mitigation Area	Red dashed line with differentiated stippling/cross hatching
	Erosion controls	Brown dashed
	Limit of work	Brown solid

*Note locations of any federal, non-state isolated vegetated wetlands

PROJECT NAME/ADDRESS: _____ DATE: _____

Ecological Restoration Limited Project

The use of winter drawdowns on Forge Pond / Lake Matawanakee, performed under the current Orders 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 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 physical removal of plants, or harvesting, as they relate to the Wetlands Protection Act, are identified by [GEIR (2004) and Practical Guide (2004)] as generally neutral:

Impacts of Harvesting Specific to the Wetlands Protection Act

1. *Protection of public and private water supply – Generally neutral (no significant interaction), although reduced plant density may benefit taste and odor control and minimize clogging of intakes.*
2. *Protection of groundwater supply – Generally neutral (no significant interaction).*
3. *Flood control – Generally neutral (no significant interaction).*
4. *Storm damage prevention – Generally neutral (no significant interaction).*
5. *Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if sediment disruption and resultant turbidity are high, or if cut vegetation is left in the lake to decay.*
6. *Protection of land containing shellfish – Generally neutral (no significant interaction) for hand pulling, suction harvesting and mechanical harvesting, but could be a detriment where hydroraking or rotovation are applied to areas containing shellfish.*
7. *Protection of fisheries – Detriment from mechanical harvesting (direct fish removal), but with potential benefit by habitat improvement (may have benefit*

and detriment to different species in same lake from same harvesting effort). Other methods of harvesting are generally beneficial (habitat improvement) or neutral (no significant interaction).

8. Protection of wildlife habitat - Potential benefit by habitat improvement, but may have benefit and detriment to different species in same lake from same harvesting effort.

The detriment mentioned in item (7) due to direct fish removal is probably unlikely with Eco-Harvesting, as the plants are removed near the water surface and the commotion of the propulsion paddles and the roller and conveyor belt are apt to scare fish away from the operation.

References:

GEIR (2004) -- Generic Environmental Impact Report on Eutrophication and Aquatic Plant Management in Massachusetts. Executive Office of Environmental Affairs, Commonwealth of Massachusetts. pg 4-42

Practical Guide (2004) -- The Practical Guide to Lake Management in Massachusetts. Executive Office of Environmental Affairs, Commonwealth of Massachusetts. [Companion to GEIR (2004)] pg 106

Natural Heritage and Endangered Species Program (NHESP)

The existing Orders of Conditions (DEP nos. 204-0872 and 334-1714) contain 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 Orders of Conditions to include the use of physical removal of plants to manage invasive plant growth has been provided to the NHESP.

We initially sought a response from NHESP on June 16, 2023 in an email that explained what is being sought in this request for amending the Orders of Conditions. We provided the narrative of this amendment request to NHESP on June 27, 2023, and asked if it would be possible to receive their assessment prior to the Conservation Commission meetings scheduled for July 11 (Littleton) and July 12 (Westford). We were told that one of the NHESP team members will be out of the office during an intervening week and it could take up to 30 days to receive their response.

NOTIFICATION TO ABUTTERS

Request for Amended Order of Conditions

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 Request for Amended Order of Conditions with the Littleton Conservation Commission for work in an area subject to protection under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw and previously permitted under MADEP File # 204-0872.
- 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 Orders of Conditions for the winter drawdowns on Lake Matawanakee / Forge Pond (DEP no. 204-0872, NHESP no. 05-18722) to include the physical removal of plants from the lake.
- E. Copies of the Notice of Intent may be examined at the Conservation Commission webpage at <https://www.littletonma.org/conservation>, under "Conservation Calendar" at least 48 hours before the meeting. If you click on the day of the meeting in the Calendar, you will be lead to a link showing posted project information. If you have questions you can contact the Littleton Conservation Commission (contact information at the end of this notice).
- F. Copies of the Notice of Intent may be obtained electronically from (check one) the X applicant or the applicant's representative by calling 978 - 201 - 9524 during the following times: 10 AM to 4 PM Monday –Friday
- G. The public hearing will be held on July 11, 2023. Information regarding the date and time of the public hearing may be obtained from the Littleton Conservation Commission (see contact info at the end of this notice).
- H. Notice of the public hearing, including date, 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://www.littletonma.org/conservation> under "Conservation Calendar" 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 Coordinator (Amy Green; agreen@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

AFFIDAVIT OF SERVICE

Request to Amend Order of Conditions

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 or Abbreviated Notice of Resource Area Delineation.

I, David Barr *(name of applicant or representative)* certify under the pains and penalties of perjury that on June 28, 2023 *(date)* I gave notification to abutters in compliance 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 Request to Amend Order of Conditions (DEP File Number 204# 0872) filed under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw by Littleton Clean Lakes Committee *(name of applicant)* with the Littleton Conservation Commission on June 26, 2023 *(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 Barr

June 28, 2023

Name

Date



**TOWN OF LITTLETON
BOARD OF ASSESSORS**
P.O. BOX 1305
LITTLETON, MA 01460
(978) 540-2410
FAX: (978) 952-2321

Date: June 27, 2023

Re: Certified List of Abutters Conservation Commission

Applicant: David Barr
Name of Firm: Clean Lakes Committee, FOFP
Mailing Address 49 Matawanakee Trail

Subject Parcel Location: Forge Pond

Subject Parcel No.:

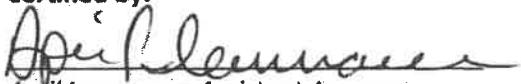
Subject Owner Name:

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) 86 including the subject parcels + 1 Applicant Requesting Abutter's List.
There are additional abutters in Westford and Groton.

Certified by:


April Iannaccone, Assistant Assessor

OFF GREAT RD	U19 9 0	MATAWANAKEE TL	U47 23 0	73 MATAWANAKEE TL	U47 33 0
MATHESON IRVING R	LUC: 717	FIELD MICHAEL S	LUC: 132	BENNETT MICHAEL T + CAROLA A	LUC: 101
MATHESON JR FRANK W		FIELD JANET C		ROCHE JOHN W	
PO BOX 697		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
HORNE W J LLC	LUC: 132	ROSS MARK	LUC: 132	JESSENSKY ANTHONY	LUC: 101
21 BERKLEY RD		HEALY KIM		71 MATAWANAKEE TL	
HULL, MA 02045-3129		103 MATAWANAKEE TRAIL		LITTLETON, MA 01460	
5 INDIAN RUN TL	U47 12 0	95 MATAWANAKEE TL	U47 24 0	69 MATAWANAKEE TL	U47 36 0
JACKSON JR DAVID A	LUC: 101	M & J MATAWANAKEE TRUST	LUC: 101	MCNAMARA JOHN+KAREN DUGGAN TRS	LUC: 101
JACKSON STACEY A		TRUSTEE FIELD MICHAEL S		MCNAMARA INVESTMENT TRUST	
42 NASHOBA 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
MCLAUGHLIN FRANCIS E	LUC: 101	SUSAN K PAUL-SOUZA REV TR	LUC: 101	HRONIK MARY E	LUC: 101
SMITH NANCY M		PAUL-SOUZA SUSAN K - TRUSTEE		67 MATAWANAKEE TL	
3 INDIAN RUN TL		93 MATAWANAKEE 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
ZUNIGA MONICA ANDREA	LUC: 101	EASTMAN KEVIN M.	LUC: 101	ELLINGBOE KARIN TRUSTEE OF	LUC: 101
1 INDIAN RUN TL		91 MATAWANAKEE TL		63 MATAWANAKEE TRAIL RLTY TR	
LITTLETON, MA 01460		LITTLETON, MA 01460		63 MATAWANAKEE TL	
111 MATAWANAKEE TL	U47 16 0	87 MATAWANAKEE TL	U47 28 0	59 MATAWANAKEE TL	U47 39 0
LUND MARIE T	LUC: 101	FIELD FREDERICK D JR+ BARBARA	LUC: 104	HADDEN FAMILY 1996 REALTY TRST	LUC: 109
111 MATAWANAKEE TL		TRS OF THE FIELD FAMILY TRUST		HADDEN STEPHEN C+REBECCA S-TRS	
LITTLETON, MA 01460		87 MATAWANAKEE TRAIL		59 MATAWANAKEE TL	
109 MATAWANAKEE TL	U47 18 0	85 MATAWANAKEE TL	U47 29 0	LITTLETON, MA 01460	
MERRILL III ERNEST OSCAR	LUC: 101	GILPATRICK RICHARD J	LUC: 101	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
SCOTT PETER TRUSTEE OF THE	LUC: 132	OLDEN DENNIS E	LUC: 101	JOHNSON KRIS WILLIAM/PATRICIA	LUC: 101
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	
105 MATAWANAKEE TL	U47 20 0	81 MATAWANAKEE TL	U47 31 0	MATAWANAKEE TL	U47 43 0
CHROBAK CHRISTOPHER P	LUC: 101	MULLINS SEAN M	LUC: 101	MCCARTHY CHRISTOPHER W TRUSTEE	LUC: 130
105 MATAWANAKEE TL		MULLINS PAMELA		DION REALTY TRUST	
LITTLETON, MA 01460		81 MATAWANAKEE TL		PO BOX 249	
103 MATAWANAKEE TL	U47 21 0	LITTLETON, MA 01460		SEABROOK, NH 03874	
ROSS MARK L	LUC: 101	77 MATAWANAKEE TL	U47 32 0	51 MATAWANAKEE TL	U47 44 0
ROSS KIMBERLY L		HAYS TIMOTHY P	LUC: 101	CULHANE JOHN P	LUC: 101
103 MATAWANAKEE TRAIL		HAYS PAMELA M		CULHANE BARBARA J	
LITTLETON, MA 01460		77 MATAWANAKEE TRAIL		51 MATAWANAKEE TRAIL	
		LITTLETON, MA 01460		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 DAVID T		MOORE STEPHEN M		SONAWANE NITIN	
BARR PATRICIA A		MOORE JOYANNE C		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	22 DEER RUN RD	U48 3 0
	LUC: 101		LUC: 101		LUC: 101
THREE BROWNS LLC		MAURO ROBERT L JR		DORAN PATRICK	
3 KINNEY AVE		14 ROBINWOOD ROAD		DORAN NICOLE	
BURLINGTON, MA 01803		LITTLETON, MA 01460		22 DEER RUN ROAD	
41 MATAWANAKEE TL	U47 49 0	16 ROBINWOOD RD	U48 14 0	24 DEER RUN RD	U48 4 0
	LUC: 101		LUC: 101		LUC: 101
KANNIARD LAURA		QUINN FRANCIS X AND WANDA A TR		HARTZEL ROBERT M	
41 MATAWANAKEE TL		THE QUINN FAMILY TRUST		GOODWILL DONNA M	
LITTLETON, MA 01460		5568 CATHERS CREEK DR		24 DEER RUN ROAD	
		POWDER SPRINGS, GA 30127		LITTLETON, MA 01460	
MATAWANAKEE TL	U47 50 0	15 WINGED COVE RD	U48 15 0	26 DEER RUN RD	U48 5 0
	LUC: 132		LUC: 101		LUC: 101
LAKE MATAWANAKEE ASSOCIATION		SKAUBITIS GEORGE H		GILPATRICK DANA E	
C/O ANTHONY JESENSKY		SKAUBITIS CHRISTINE		BREITENWISCHER JANNA	
71 MATAWANAKEE TR		15 WINGED COVE ROAD		26 DEER RUN RD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
37 MATAWANAKEE TL	U47 51 0	13 WINGED COVE RD	U48 16 0	18 ROBINWOOD RD	U48 52 A
	LUC: 101		LUC: 101		LUC: 101
FOLEY PATRICIA A		MANN KYLE		ROBERTS SIMON	
37 MATAWANAKEE TL		FIELD MELISSA		ROBERTS EMMA	
LITTLETON, MA 01460		13 WINGED COVE RD		18 ROBINWOOD ROAD	
		LITTLETON, MA 01460		LITTLETON, MA 01460	
35 MATAWANAKEE TL	U47 52 0	11 CHIPMUNK LN	U48 17 0	28 DEER RUN RD	U48 6 0
	LUC: 101		LUC: 101		LUC: 101
HYAM NANCY + TRAINOR MICHAEL TR		PETERSEN CAROL J TRUSTEE		MCDONOUGH EDEN R SALTO	
JANICE A TRAINOR IRRVCB RES TR		CHIPMUNK LANE REALTY TRUST		MCDONOUGH ROBERT F	
35 MATAWANAKEE TRAIL		11 CHIPMUNK LN		28 DEER RUN RD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
31 MATAWANAKEE TL	U47 54 0	9 CHIPMUNK LN	U48 18 0	7 ROBINWOOD RD	U48 8 0
	LUC: 101		LUC: 101		LUC: 101
BUSH CHARLES M		ROSS MARK E		SULLIVAN JANET F	
BUSH PAULA B		WAUGH MOLLY O		SULLIVAN KATHRYN A	
31 MATAWANAKEE TRAIL		9 CHIPMUNK LANE		7 ROBINWOOD RD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
20 DEER RUN RD	U48 1 0	5 CHIPMUNK LN	U48 19 0	8 ROBINWOOD RD	U48 9 0
	LUC: 101		LUC: 101		LUC: 101
PORTANOVA EUGENE		BERKOWITZ THOMAS C		EDMOND GILPATRICK INVEST TRST	
PORTANOVA ROSEMARY		5 CHIPMUNK LANE		JEANINE GILPATRICK INVEST TRST	
219 HUNNEWELL ST		LITTLETON, MA 01460		8 ROBINWOOD ROAD	
NEEDHAM, MA 02494				LITTLETON, MA 01460	
10 ROBINWOOD RD	U48 10 0	18 DEER RUN RD	U48 2 0	29 MATAWANAKEE TL	U48 15 0
	LUC: 101		LUC: 101		LUC: 101
CORCORAN DONALD F		MILLARD INVESTMENT TRUST		SWANA TRACEY LEE	
CORCORAN SHIRLEY E		MILLARD JANE L & JOSHUA C-TRS		SWANA DAVID J	
19 ELLIOTT ST		18 DEER RUN RD		29 MATAWANAKEE TL	
MELROSE, MA 02176		LITTLETON, MA 01460		LITTLETON, MA 01460	

27 MATAWANAKEE TL	U49 17 0	2 SCOTT RD	U49 28 2	6 BLOOD RD	U49 33 0
	LUC: 101		LUC: 101		LUC: 017
AUGER JR RICHARD J		PETERSON WILLIAM R AND		MATHESON IRVING R	
27 MATAWANAKEE TR		PETERSON KRISTINE K		PO BOX 697	
LITTLETON, MA 01460		2 SCOTT ROAD		LITTLETON, MA 01460	
		LITTLETON, MA 01460			
25 MATAWANAKEE TL	U49 18 0	4 SCOTT RD	U49 28 4	8 BLOOD RD	U49 34 0
	LUC: 101		LUC: 101		LUC: 101
CARLSON KRIS A		CALIENDO ROBERT M TRUSTEE OF		ROYAL JOSEPH E	
CARLSON DEBRA J		BCAL TRUST		ROYAL MAUREEN O	
25 MATAWANAKEE TRAIL		4 SCOTT RD		8 BLOOD ROAD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
21 MATAWANAKEE TL	U49 20 0	5 SCOTT RD	U49 26 5	10 BLOOD RD	U49 35 0
	LUC: 101		LUC: 101		LUC: 017
MCDONOUGH HUGH R		SCOTT PETER		MATHESON IRVING R	
MCDONOUGH STEPHANIE A		5 SCOTT RD		PO BOX 697	
21 MATAWANAKEE TL		LITTLETON, MA 01460		LITTLETON, MA 01460	
LITTLETON, MA 01460					
19 MATAWANAKEE TL	U49 21 0	6 SCOTT RD	U49 26 6	12 BLOOD RD	U49 36 0
	LUC: 101		LUC: 101		LUC: 101
O'BRIEN KRISTIN LYNN		WHEELER DONALD W		FIELD MATTHEW P	
33 BALDWIN HILL RD		WHEELER NANCY R		FIELD SHEILA	
LITTLETON, MA 01460		6 SCOTT RD		12 BLOOD ROAD	
		LITTLETON, MA 01460		LITTLETON, MA 01460	
17 MATAWANAKEE TL	U49 21 A	7 SCOTT RD	U49 26 7	16 A DEER RUN RD	U49 37 0
	LUC: 101		LUC: 101		LUC: 101
WHITEACRE PROPERTIES, LLC		SANTAU VLAD VALENTIU		PORTANOVA KEITH	
150 EAST CENTRAL ST		SANTAU IOANA		PORTANOVA JASON	
NATICK, MA 01760		7 SCOTT RD		219 HUNNEWELL ST	
		LITTLETON, MA 01460		NEEDHAM, MA 02494	
15 MATAWANAKEE TL	U49 22 0	8 SCOTT RD	U49 26 8	15 BLOOD RD	U49 38 0
	LUC: 101		LUC: 101		LUC: 101
SHEPHERD THOMAS T		KALDESTAD OYVIND D		MATHESON IRVING R	
MCKEEVER LESLIE B		KALDESTAD ASE T		MATHESON JR FRANK W	
15 MATAWANAKEE TL		8 SCOTT ROAD		PO BOX 697	
LITTLETON, MA 01460		LITTLETON, MA 01460-0366		LITTLETON, MA 01460	
11 MATAWANAKEE TL	U49 22 A	9 SCOTT RD	U49 27 0		
	LUC: 101		LUC: 101		
DAVIS FAMILY 2003 TRUST		BUGDEN CHRISTOPHER			
DAVIS T F JR & C A		PASCALE BRENDA L			
11 MATAWANAKEE TL		9 SCOTT RD			
LITTLETON, MA 01460		LITTLETON, MA 01460			
7 MATAWANAKEE TL	U49 23 0	11 SCOTT RD	U49 28 0		
	LUC: 101		LUC: 101		
SULLIVAN PATRICE M		EMILE J LEGAULT FAMILY TRUST			
SULLIVAN JOHN K		TRUSTEE LEGAULT EMILE J			
7 MATAWANAKEE TRAIL		11 SCOTT RD			
LITTLETON, MA 01460		LITTLETON, MA 01460			
5 MATAWANAKEE TL	U49 24 0	FORGE POND	U49 29 0		
	LUC: 101		LUC: 717		
WILSON DAVID A+ELIZABETH C TRS		MATHESON IRVING R			
OF WILSON FAMILY TRUST		MATHESON JR FRANK W			
5 MATAWANAKEE TL		PO BOX 697			
LITTLETON, MA 01460		LITTLETON, MA 01460			
MATAWANAKEE TL	U49 25 0	2 BLOOD RD	U49 31 0		
	LUC: 132		LUC: 101		
WILSON DAVID A		MATHESON IRVING R			
5 MATAWANAKEE TL		PO BOX 697			
LITTLETON, MA 01460		LITTLETON, MA 01460			