Town of Hubbardton

1831 Monument Hill Road – Hubbardton
Castleton, VT 05735

Tel: 802/273-2951 Fax: 802/273-3729

December 28, 2015

To Whom It May Concern,

The members of the Hubbardton Board of Selectmen have reviewed the Application for use of Pesticides under an Aquatic Nuisance Control Permit completed by the Lake Beebe Watershed Association. The application is for the use of Sonar on Lake Beebe which is to be applied by Marc Bellaud of Aquatic Control Technology.

The Board of Selectmen support the use of Sonar on Lake Beebe.

Sincerely,

Members of Hubbardton's Board of Selectmen

James Casey

Dwayne Gibbs

Robert Gibbs, Chair

Richard Grabowski

Janet Morey

Application for use of **Pesticides** under an **Aquatic Nuisance Control Permit**

Per 10 V.S.A. Chapter 50, § 1455

Application Number: 2016-C01

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
LAKES & PONDS PROGRAM

Submission of this application constitutes notice that the entities listed below intend to use pesticides in waters of the State to control aquatic nuisance plants, insects, or other aquatic life; and that the entities below have demonstrated that (1) there is no reasonable nonchemical alternative available; (2) there is acceptable risk to the nontarget environment; (3) there is negligible risk to public health; (4) a long-range management plan has been developed which incorporates a schedule of pesticide minimization; and (5) there is a public benefit to be achieved from the application of a pesticide or, in the case of a pond located entirely on a landowner's property, no undue adverse effect upon the public good. Submit an application fee of $75 for a private pond or $500 for all other waterbodies, made payable to the State of Vermont. All information required on this form must be provided, and the requisite fees must be submitted to be deemed complete.

A. Applicant Information

1.Name: Town of Hubbardton

2a. Mailing Address: 1831 Monument Hill Road in Hubbardton,

2b. Municipality: Castleton | 2c. Vermont: | 2d. Zip: 05735

3. Phone: 802-273-3295 | 4. Email: <clrkhubb@shoreham.net>

B. Pesticide Applicator Information (Check box if same as above in Section A: ☐) 1.

Entity's Name: Aquatic Control Technology

2a. Mailing Address: 590 Lake Street,

2b. Municipality: Shrewsbury | 2c. State: MA | 2d. Zip: 01590

3. Phone: 508-865-1000 | 4. Email: <mbellaud@aquaticcontroltech.com>

C. Application Preparer Information (Check box if same as above: Section A ☐ and/or B ☐) 1.

Preparer's Name: Lake Beebe Watershed Association (Don Sondergeld, President)

2a. Mailing Address: 469 Birch Road in Hubbardton

2b. Municipality: Brandon | 2c. State: Vermont | 2d. Zip: 05733

3. Phone: 802-273-2251 | 4. Email: <don@shoreham.net>

D. Waterbody Information

1. Name of waterbody: Lake Beebe 2. Municipality: Hubbardton, VT

3. Are there wetlands associated with the waterbody? Yes
Contact the Vermont Wetland Program: (802) 828-1535 for additional information.

4. Are there rare, threatened or endangered species associated with the waterbody? Yes
Contact the Vermont Fish & Wildlife Natural Heritage Inventory: (802) 241-3700 for additional information.

5a. Is this waterbody a private pond (per 10 V.S.A. 5210)? No If No, skip to Question D6.

6. List the uses of the waterbody –
Water supply Boating Swimming Fishing

E. Treatment Information

1a. Proposed start date: Early May 2016

1b. Proposed end date (if known):

2. Aquatic nuisance(s) to be controlled:
Plant/Algae/Animal: Eurasian Milfoil

Submit additional information as needed.

3. Pesticide(s) to be used[1]:
Trade Name: Sonar A.S.
EPA Registration #: 67690-4
Submit a copy of the Product Label & Material Safety Data Sheet.

4. Provide a map of control activity area.
Entire lake, see Map later in this application

5. Application rate (ppm): 5-8 ppb for 90 days
Described below in the Project Description in this application

6. Attach a narrative description of the proposed project to include the following items:
a) Reason(s) to control the aquatic nuisance;
b) Brief history of the aquatic nuisance in the waterbody;
c) Reason why no reasonable nonchemical alternatives are available; and,
d) Description of the proposed control activity.

7. If you answered "no" to D5b above, then a Long-range Management Plan[2] (LMP) is required:
a) Describe how control of the nuisance species will be conducted for the duration of the permit (must be at least a 5 year time span and incorporate a schedule of pesticide minimization); and,
b) Explain how the LMP will be financed; include a budget and funding sources for each year.

F. Applicant/Applicator Certification

As APPLICANT, I hereby certify that the statements presented on this application are true and accurate; guarantee to hold the State of Vermont harmless from all suits, claims, or causes of action that arise from the permitted activity; and recognize that by signing this application, I agree to complete all aspects of the project as authorized. I understand that failure to comply with the foregoing may result in violation of the 10 VSA Chapter 50, § 1455, and the Vermont Agency of Natural Resources may bring an enforcement action for violations of the Act pursuant to 10 V.S.A. chapter 201.

Signature for Robert Gibbs Town of Highgate Select Board Chair

Applicant/Applicator Signature: Marc Bellaud Date: 12.22.2015

G. Application Preparer Certification (if applicable)

As APPLICATION PREPARER, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Application Preparer Signature: Don Sondergeld Date: 12.22.2015

H. Application Fees

Submit this form and the $75 or $500 fee to:

Vermont Department of Environmental Conservation
Watershed Management Division
Aquatic Nuisance Control Permit Program
1 National Life Drive, Main 2 Montpelier,
VT 05620-3522

Direct all correspondence or questions to the Aquatic Nuisance Control Permit Program at:
ANR.Shoreland@vermont.gov
For additional information visit: www.watershedmanagement.vt.gov

[1] The application fee for the aquatic pesticide Aquashade® and copper compounds used as algaecides is **$50** per application.

[2] Any landowner applying to use a pesticide for aquatic nuisance control on a pond located *entirely* on the landowner's property is exempt from the Longrange Management Plan requirement, as per 10 VSA §1455(e)

LAKE BEEBE
2016 SONAR HERBICIDE TREATMENT: PROJECT DESCRIPTION

INTRODUCTION

Lake Beebe is a 111-acre lake located in Hubbardton, Vermont. Presence of the invasive aquatic plant Eurasian watermilfoil (*Myriophyllum spicatum*) was first confirmed in the lake in 1991. Eurasian watermilfoil control efforts employed include a Sonar (fluridone) herbicide treatment in 2003, suction and hand harvesting, and the use of benthic barriers. Eurasian watermilfoil has again reached levels where non-chemical control strategies cannot maintain desired open-water conditions.

A comprehensive aquatic plant survey was conducted by the Darrin Fresh Water Institute (DFWI) in 2015. Eurasian watermilfoil was the most common plant found in the lake; present at 70% of the survey data points. Eurasian watermiilfoil growth was characterized as being moderate to dense during DFWI's September 2015 survey, with the most significant beds found at the north and south ends of the lake. Using available bathymetric maps of Lake Beebe and the distribution of Eurasian watermilfoil documented by DFWI in 2015, nearly 50% of the lake appears to be capable of supporting Eurasian watermilfoil growth. Considering the current extent of Eurasian watermilfoil growth, the prior herbicide treatment at Lake Beebe and the expected duration of Eurasian watermilfoil control following treatment with triclopyr and fluridone herbicides, a whole-lake treatment with fluridone herbicide is proposed for the 2016 season.

The following outlines a Five-Year Integrated Management Plan that targets control of Eurasian watermilfoil through the use of aquatic herbicide treatments and the continued use of diver hand-pulling, suction-harvesting and bottom barrier installations. The Town of Hubbardton and its project partner the Lake Beebe Watershed Association Ltd. (LBWA) are requesting issuance of a 5-year maintenance permit for a whole lake treatment with Sonar (fluridone) herbicide in 2016. Area-selective spot-treatments with Renovate (triclopyr) herbicide may be considered in future years, subject to annual approval of the specific treatment areas by DEC.

EXISTING CONDITIONS

Eurasian watermilfoil (EWM) is widely distributed in Lake Beebe with moderate to dense growth at most locations. DFWI found EWM at 70% of the 96 sample points that were surveyed in 2015, that were based on a 100 meter grid throughout the entire lake. The greatest concentrations of EWM were found at the north end and in the two coves at southern end. A similar distribution of EWM was documented in prior years.

DFWI identified 6 meters as the maximum depth of colonization of EWM in Lake Beebe. While there may only be a total of 30 acres currently supporting dense EWM beds, nearly 50% of the lake is capable of supporting dense EWM growth.

Lake Beebe continues to support a fairly diverse and robust population of native aquatic plants. DFWI documented 21 aquatic plant species in 2015. Common native plants included: *Zosterella dubia* 35%, *Elodea Canadensis* 20.9%, *Potamogeton illinoensis* 20.9%, *Vallesneria Americana* 20.9%, *Ceratophyllum demersum* 18.6%, *Chara/Nitella* 18.6%, *Najas flexilis* 16.3%, *Potamogeton zosteriformis* 14.0%, *Potamogeton gramineus* 11.6%, and five other species with frequency of occurrence values between 10% and 2.3%.

OBJECTIVES/GOALS

Principal objectives of the five-year integrated management plan being proposed for Lake Beebe are:

1. Effectively control invasive Eurasian watermilfoil growth to promote a diverse native plant community, to improve fish and wildlife habitat, and to support recreational use of the lake.
2. Achieve multiple-year Eurasian watermilfoil control in treatment areas in order to reduce the scope, frequency and cost of follow-up treatments in subsequent years.
3. Use a combination of techniques – treatment with the systemic-acting Sonar (fluridone) herbicide, possible follow-up treatments with Renovate (triclopyr) herbicide, suction harvesting and hand-harvesting, and limited use of benthic barriers – to achieve the desired level of Eurasian watermilfoil control in the most cost-effective fashion.
4. Prevent the introduction and establishment of any other aquatic nuisance species in Lake Beebe.

SONAR (FLURIDONE) HERBICIDE TREATMENT PLAN – 2016 SEASON

Recent herbicide sensitivity studies completed by SePRO Corporation suggested that EWM is susceptible to low-dose concentrations of fluridone herbicide. Studies and field treatment experience in recent years suggest that exposing EWM to fluridone early in the growing season can improve treatment efficacy. This occurs because the growth regulating properties of fluridone are more pronounced on smaller plants and there is less plant biomass that needs to be degraded. This should allow for more complete exhaustion of starch reserves in the EWM root crowns and ultimately result in longer duration control. An early-season, low-dose treatment approach was used at Lake Hortonia in 2015 and it resulted in better control than had been seen in prior treatments, along with reduced impacts to non-target native plants.

In 2016 we do not recommend waiting for a thermocline to become established. Instead, we recommend initiating the treatment as soon as active growth begins, which is expected by early-mid May. Some fluridone will inevitably mix into deeper water, but exposure to even lower concentrations of fluridone will have a growth regulating effect. Once the thermocline becomes established, the fluridone concentration will be maintained between 5 and 8 ppb to achieve a total exposure period of at least 90 days, unless EWM plants have completely collapsed and degraded before 90 days is reached. Following early season fluridone treatments performed on MA, CT and NY water bodies, we have seen complete EWM biomass control in less than 90 days, but in all cases time-release pellet formulations of fluridone were used which allowed for targeted herbicide placement around the plants. Since only liquid fluridone (Sonar A.S.) will be used at Lake Beebe the EWM plants will likely be exposed to lower concentrations of fluridone, which may slow the rate of plant degradation. At Lake Hortonia in 2015, EWM frequency was reduced to 7% during the late season survey using this treatment approach, as compared to a 33% frequency documented during the late season survey following the 2010 Sonar herbicide treatment.

Since the 2016 treatment will be initiated before a thermocline is established, we recommend only applying Sonar A.S. to the EWM infested areas of the lake. The initial dose will target a lake-wide dose of 5 ppb, but if it is only applied to the EWM infested areas these areas will be dosed with approximately 10 ppb. This will provide for slightly elevated fluridone concentrations in EWM infested areas and help slow the migration of the fluridone into deeper, unifested water. Fluridone will eventually mix with untreated water and we expect that the concentration will be homogenous within one week.

Specific plans for the 2016 Sonar A.S. herbicide treatment program at Lake Beebe are detailed in the table below:

Herbicide Formulation	**Sonar A.S.** Liquid EPA Reg. No.: 67690-4 Active Ingredient: fluridone: 1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1*H*)-pyridinone...41.7%
Application Rate	Target concentration: begin with 5 ppb in early season and then once a thermocline is established maintain between 5 and 8 ppb for the balance of 90 days or longer Initial Application: A whole-lake dose of 5 ppb based on a volume of 1980 ac-ft, which is the approximate lake volume when there is a thermocline established at 18 feet. The product will be applied in EWM infested areas resulting in short-term concentrations of 10 ppb. Homogenous concentrations are expected within one-week. Booster Applications: In-lake fluridone concentrations would then be monitored weekly using the FasTEST immunoassay procedure offered by SePRO. The first booster application would be scheduled and performed once in-lake concentrations approaches 3 ppb. Once a thermocline is established, remaining booster applications would be performed once the fluridone concentration approaches 5 ppb to restore the in-lake concentration to 8 ppb. Three or four applications are anticipated in 2016, but we recommend a contingency for a fifth application due to the earlier planned starting date of the treatment program.
Quantity of Herbicide to be Applied	Approximately of 21.5 gallons (16 ppb lakewide) of Sonar AS are projected for the 2016 treatment program. The total amount of Sonar AS to be applied will be determined by the actual in-lake concentrations reported by the FasTEST monitoring. If the EWM degrades more quickly as expected, it is possible that less herbicide will be applied.
Dose Calculations	The amount of herbicide to be applied will be based on the volume of water being treated. The lake will be divided into distinct treatment basins. The acreage and water volume of each basin will be calculated and a spreadsheet will be created to accurately calculate the specific dose required for each basin. In the deeper basins that thermally stratify, the water volume and resulting herbicide dose will be based on water volume found above the thermocline.
Treatment Timing	Timing of the initial application will be determined following the pre-treatment inspection in late April or early May. The objective is to initiate treatment at the beginning of active growth. The target date for the initial application is in early-mid May. Primary factors that will determine the date of the initial application include: stage of EWM growth and amount of outflow.
FasTEST Monitoring	The FasTEST immunoassay procedure offered by SePRO will be used to monitor in-lake fluridone concentrations during the project. Six sampling locations are proposed: one from the north end, one from mid-lake, one from the middle of each cove at the south end, one at the outlet and one downstream off of Hortonville Road prior to the confluence with Austin Pond. Surface grab samples will be collected approximately 0.5 meters below the surface. LBWA volunteers will be trained in sample collection. Samples will then be shipped to SePRO's laboratory in Whittakers, NC via overnight delivery. SePRO will provide results directly to DEC via email within 24-48 hours of receipt of samples. In 2004 and 2010, samples were collected 24-hours following each application and then sampling frequency could probably be reduced to every 10-14 days to reduce associated expenses.

Method of Application	Applications will be made using an Airboat or conventional boat that facilitates operation in shallow and heavily vegetated sections of the lake. The concentrated liquid formulation will be diluted with lake water at least 25:1 in a mixing tank on board the airboat. The diluted herbicide solution will be evenly injected subsurface through weighted hoses using a calibrated spray system. A GPS system will be used to provide real-time navigation and to insure that the herbicide is evenly applied throughout the designated treatment area. All herbicide treatments will be performed by a VT licensed Aquatic Applicator in accordance with the product label instructions and conditions of the DEC permit.

The treatment program is expected follow the timeline and protocol below:

Late April/Early May	Early season survey to develop Final Treatment Map; Submit map and specific treatment plans to DEC for review and approval; Perform required pre-treatment notification
Early-Mid May - August	Schedule and perform Sonar herbicide treatments; post-treatment monitoring
July-September	Surveys/inspections/herbicide residue testing
August/September	Comprehensive Late Season Survey
November/December	Submission of Annual Report that identifies preliminary plans for upcoming year

IMPACTS TO NATIVE PLANT COMMUNITY

Significant adverse impacts to the native plant community are not expected from the proposed herbicide treatments to Lake Beebe. Treatment programs at other Vermont lakes in recent years have not shown significant impacts to native plant populations. Some year of treatment impacts are anticipated in the year of treatment with Sonar (fluridone) herbicide, but these plants generally recover within 1-2 years of the treatment. Based on known susceptibility and the results of the Sonar A.S. treatments at nearby Lake Hortonia, the native plant species at Lake Beebe expected to be impacted by the treatment program include: *Ceratophyllum demersum, Elodea Canadensis, Megalodonta beckii, Najas flexilis, Potamogeton illinoensis* and *Stuckenia pectinata*. While there were some impacts seen on some of these species at Lake Hortonia following the 2015 treatment program, impacts were less pronounced than they appeared to be in prior years.

Only Humped Bladderwort (*Utricularia gibba)* is found on Vermont's rare plant list. This species has was found in Lake Hortonia and its frequency actually increased in 2015 during the year of the fluridone herbicide treatment. Furthermore, this plant has been found in the Lake St. Catherine system, Lake Fairlee, and Burr Pond and the evidence has not shown significant changes in the populations following large-scale triclopyr treatments.

WATER USE RESTRICTIONS AND NOTIFICATION

Water Use Restrictions – Anticipated water use restrictions following treatment will follow language of the conditions of the DEC Permit. It is expected that the treated water body will be closed to all uses (swimming, boating, fishing, irrigation and all domestic uses) on the day of treatment. Swimming has been allowed to resume on the second day following treatment. Domestic use has been allowed to resume once it is has been confirmed that the in-lake concentrations are less than 20 ppb. Irrigation has been restricted for 30 days following completion of the treatment program or as determined by DEC.

Written Notification – LBWA will provide written plans of treatment in mailed document, which will be provided to all property owners. Information to be included in the notice will be provided in the permit.

Posting – In accordance with DEC permit requirements, the affected shorelines and access points to the lake will be posted with signs that warn of the pending herbicide application and water use restrictions to be imposed. The LBWA will work closely with DEC to develop posters/signs that will be most effective for this purpose. The LBWA notices will highlight that the signs will be the source of information for the specific treatment areas and water use restrictions.

NON-CHEMICAL CONTROL PROGRAM

The Town/LBWA remain committed to continuing with non-chemical controls as part of this integrated milfoil management program. Techniques that will be used include:

- Suction harvesting
- SCUBA Diver hand-pulling
- Snorkel hand-pulling (volunteer)
- Benthic Barrier Matting
- Volunteer monitoring
- Education – outreach with member communications & volunteer training

Herbicide treatment is needed in 2016 to bring the EWM back to more manageable levels. In the future, herbicides may be used to target areas of more abundant EWM growth, while non-chemical techniques will be utilized on smaller and more widely scattered patches. The program objective will be to reduce the distribution and density of EWM so that herbicide use can be minimized. LBWA also remains committed to initiating and supporting responsible and practical watershed management protection measures.

The Town and LBWA will work collaboratively to fund non-chemical control efforts in subsequent years of the program. Funding will likely come from several sources including: the Town, LBWA volunteer contributions, and the State Grant-In-Aid Program. Actual amounts to be committed in each year of the program will likely vary depending on need and availability of funds from the various sources.

The following table provides a rough breakdown of estimated program costs. Please note these are estimates and are subject to the availability of funds.

Estimated Program Costs – 2015 dollars	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Year	2016	2017	2018	2019	2020
Herbicide Treatment Program	$64,500	$0	$0	$20,000	$0
Suction Harvesting / Hand-Pulling	$0	$10,000	$10,000	$0	$10,000
Permitting / Notifications	$1,000	$0	$0	$1,000	$0
Monitoring / Reporting	$2500	$2500	$2500	$2500	$2500
TOTALS	$ 68,000	$ 12,500	$ 12,500 ±	$23,500	$12,500

CONTINGENCY FOR FOLLOW-UP TREATMENTS WITH RENOVATE (TRICLOPYR) HERBICIDE

While it is not expected that any herbicide treatment will be required at Lake Beebe for 2-3 years or possibly longer following a whole-lake application of Sonar (fluridone) herbicide, it is expected that some follow-up herbicide treatments may be required in subsequent years. Fluridone is not well suited for spot or partial-lake treatments.

As a contingency, a request to consider the use of Renovate (triclopyr) herbicide is included for years 3-5 of the permit. This would only occur if EWM regrowth is so extensive that it is determined that non-chemical control strategies will not be cost-effective and after detailed discussions with DEC.

Based on the recent treatment experiences with triclopyr herbicide at the other Vermont lakes the following protocols are recommended for follow-up triclopyr treatments in Lake Beebe:

1. Formulation – Utilize Renovate 3 (liquid) and Renovate OTF (granular) formulations of triclopyr herbicide. The granular formulation has proven to be effective for steeply sloped areas, smaller EWM beds and in areas where there is potential for excessive dilution from untreated water. The granular carrier takes the herbicide to the lake bottom where it is released. The liquid formulation could be used in larger beds and cove areas that will not be subject to as much dilution and in areas where access for application of the granular formulation would be challenging.

2. Application – Plan to utilize a split-application approach where appropriate to increase the herbicide concentration-exposure-time. Approximately 70% of the herbicide will be sequentially applied to all areas being treated; then the remaining herbicide is applied to the same areas in the same sequence several hours later.

3. Timing – Delay treatment until there is enough active EWM growth to maximize herbicide uptake. Additional EWM biomass is expected to provide more stem/leaf surface area for herbicide uptake and may help limit dilution caused by water movement. EWM plants should be filling two-thirds to three-quarters of the water column. Treatments will likely be scheduled between late May and late June. Optional late summer (post Labor Day) spot-treatments may be considered in some cases.

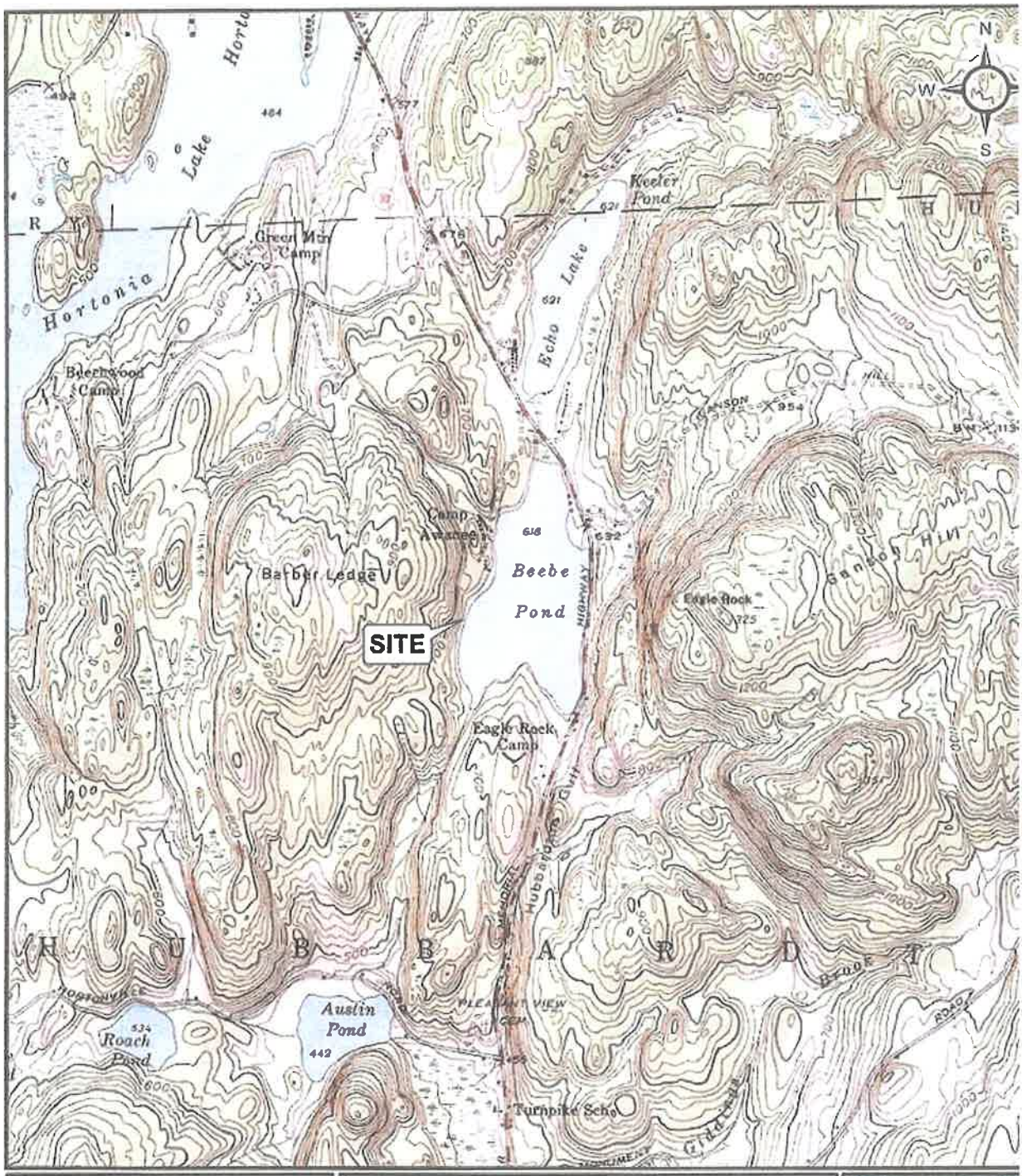
4. Rate – The application rate (dose) will be determined by the size and configuration of the treatment area and the formulation of Renovate being applied. Where practical, the application rate will be consistent with rates used at other Vermont lakes in recent years. This usually involves targeting 2.0 – 2.5 ppm of triclopyr in the bottom four feet of the water column with Renovate OTF granular (216 - 270 lbs/acre). Renovate 3 liquid applications have generally targeted whole water column applications of 0.75 – 1.5 ppm. However, approval is being requested for treatment using the maximum application rate of 2.5 ppm as listed on the product labels, to facilitate effective treatment of narrow, shoreline beds of EWM and small (<5 contiguous acres) treatment areas. The concentration and formulation to be applied would be specified in a specific treatment plan that would be submitted to DEC with the proposed treatment map following the early season survey.

Herbicide	**Renovate 3** Liquid formulation EPA Reg. No.: 62719-37-67690 Active Ingredient: triclopyr (3,5,6-trchloro-2-pyridinyloxyacetic acid, triethylamine salt) 44.4%	**Renovate OTF** Granular formulation EPA Reg. No.: 67690-42 Active Ingredient: triclopyr (3,5,6-trchloro-2-pyridinyloxyacetic acid, triethylamine salt) 14.0%
Application Rate	0.75 – 1.5 ppm Amount to be applied would be calculated based on the targeted water volume being treated; Lower rates would be used for treatment of entire coves or large contiguous areas.	2.0 – 2.5 ppm Rate calculation based on bottom 4 feet of the water column or more as conditions warrant.
Treatment Timing	Between late May and late June Delay treatment until there is more active milfoil growth to improve herbicide uptake. Additional milfoil biomass is expected to provide more surface area for herbicide uptake and may help limit dilution caused by water movement. Possible late season (post Labor Day) applications if warranted	Between late May and late June Delay treatment until there is more active milfoil growth to improve herbicide uptake. Additional milfoil biomass is expected to provide more surface area for herbicide uptake and may help limit dilution caused by water movement. Possible late season (post Labor Day) applications if warranted
Method of Application	The concentrated liquid formulation will be injected subsurface through weighted hoses using a boat-mounted pumping system. GPS systems with WAAS or differential accuracy will be used to provide real-time navigation and to insure that the herbicide is evenly applied throughout the designated treatment area. Split-applications may be performed in some instances to help increase the herbicide concentration-exposure-time. This would be accomplished by applying 50-70% of the total dose initially and then following with the remaining product several hours later.	The solid (granular) formulation will be evenly applied using the eductor/boom spray system or calibrated cyclone spreader. GPS systems with WAAS or differential accuracy will be used to provide real-time navigation and to insure that the herbicide is evenly applied throughout the designated treatment area. Split-applications may be performed in some instances to help increase the herbicide concentration-exposure-time. This would be accomplished by applying 50-70% of the total dose initially and then following with the remaining product several hours later.

September 2015 Lake Beebe Milfoil Map

The above map is from data contained in the 9/2015 Plant Survey by Darrin that is on file with Vermont's Watershed Management Division.

Location of Lake Beebe in Hubbardton, Vermont



Sonar Precautions

See: https://www.sepro.com/documents/SonarAS_Label.pdf **(6 pages)**

Sonar Data Sheet

See: https://www.sepro.com/documents/SonarPR_MSDS.pdf **(11 pages)**