

**Massachusetts Department of Conservation and Recreation  
Division of Water Supply Protection, Office of Watershed Management  
*Forest Management Project Summary***

Project Title: **Harding Hill Spongy Moth Salvage**  
DWSP Harvest Permit Number: S3WR  
DWSP Proposal ID: WR-19-20S  
DCR Forest Cutting Plan File Number: 021-9502-19

***Site Information***

Watershed: Ware River Watershed  
Town(s): Barre  
Acres: 15  
Nearest Road: Coldbrook Rd  
Natural Heritage Atlas overlap?: No  
Public Drinking Water Supply Watershed?: Yes  
Forest Types: Mixed oak  
Area of Critical Environmental Concern (ACEC)?: No  
Soils: 910C Woodbridge-Paxton association and 902E Charlton-Paxton association  
Wetland Resources: Several seasonal streams and a wetland are near the harvest area.  
Vernal Pools: Yes – 2 vernal pools present outside of the harvest area, but within 200 feet of the edge of the harvest.

***Harvest Information***

Harvest Start Date: 11/7/18  
Harvest End Date: 2/14/19  
Number of Wetland Crossings: None  
Number of Stream Crossings: None

***Best Management Practices Applied***

Stream Crossings: There are no stream crossings.  
Filter Strips: There is no harvesting in a filter strip.  
Wetland Crossings: There are no wetland crossings.  
Harvesting in Wetlands: There is no harvesting in wetlands.

***DWSP Forester supervising this harvest***

Name: Ken Canfield  
Forester License number: 431  
Phone number: 857 274 7090  
Email: [Kenneth.canfield@mass.gov](mailto:Kenneth.canfield@mass.gov)

***Narrative***

***General Description/Forest Composition/History***

The harvest area is located east of Coldbrook Rd and north of Reuben Walker Rd in Barre. This oak stand was last thinned in 1995. Recent defoliation by Spongy Moth caterpillars has left many trees dead or dying. Diverse natural regeneration is abundant throughout the stand.

Tree species present are red, black, scarlet, and white oak, red maple, hickory, eastern white pine, red pine, hemlock, black cherry, sugar maple, and quaking aspen.

Invasive shrubs, particularly glossy buckthorn, are present. Some invasive shrubs were hand-pulled during the marking of this lot. Harvesting trees in patches puts enough sunlight on the ground to create conditions that will help native tree species out-compete invasive shrubs over time.

The soil is moderately well drained.

### ***Site Selection***

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. A healthy and resilient forest is comprised of diverse native tree and shrub species and multiple age classes of trees.

This area was chosen because of the patches of oak trees that have been recently killed by spongy moth caterpillars. A combination of stress from a multi-year drought along with repeated extreme spongy moth defoliation events has resulted in widespread oak mortality throughout the Quabbin and Ware River forests. The degree of damage varies from place to place, but there are unfortunately some significant areas with near complete mortality. While a large amount of the dead oak will remain in place to add to wildlife habitat and forest structural diversity, DWSP intends to temporarily shift its forest management focus to harvesting in areas of significant oak mortality. These areas would have otherwise been harvested through normal practices many years from now.

### ***Silvicultural Objectives***

Salvage dead and dying oak stems, particularly where they occur in groups. Also remove low quality/vigor trees within those groups. There are three patches that are 2.6, 3.2, and 3.4 acres in size. There is also approximately 6 acres adjacent to the patches where the mortality is more sporadic where the salvage will resemble a thinning. The diverse natural regeneration that exists in the area will be released.

### ***Cultural Resources***

Standard practice dictates that every effort is made to avoid disturbing stone walls and other cultural resources. One minor stonewall will have to be breached to establish a landing on Coldbrook Rd.

***Rare or Endangered Species***

Two vernal pools are present adjacent to the harvest area. They will be buffered and protected.

## Figures

### Figure 1. Final Forest Cutting Plan

<b>Forest Cutting Plan</b>		and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00		AUG 28 2018	<b>For DCR Use Only:</b> File Number <u>021-9502-19</u> Case No. <u>NO</u> Date Rec'd <u>8/12/18</u> Nat. Hert. <u>YES</u> Earliest Start <u>9/13/18</u> Pub. Dr. Wat. <u>NO</u> River Basin <u>CHICOOPEE</u> ACEC <u>NO</u> Gen. Obj. <u>LT</u>																																														
<b>Site Information</b>	<b>Location</b>				<b>Landowner</b>																																														
	Town	<u>Barre</u>			Name <u>DCR Division of Water Supply Protection</u>																																														
	Road	<u>Coldbrook Rd</u>			Mailing Address <u>485 Ware Rd</u>																																														
	Acres	<u>15</u>	Proposed Start Date <u>9/1/18</u>		Town, State, Zip <u>Belchertown, MA 01007</u>																																														
	Vol. MBF	<u>83.1</u>	Vol. Cds.	<u>111</u>	Phone	<u>(413) 323 - 6921</u>																																													
	Vol. Tons				Ch61	<input type="checkbox"/> 61A <input type="checkbox"/> 61B <input type="checkbox"/> Stew <input type="checkbox"/> *Case #																																													
					FSC	<input type="checkbox"/> CR <input type="checkbox"/> CR Holder																																													
	<b>Plan Preparer</b>				<b>Licensed Timber Harvester**</b>																																														
	Name <u>Kenneth W. Canfield</u>				Name <u>TBA PIRNER LOGGING</u>																																														
	Address <u>578 Old Turnpike Rd</u>				Address <u>152 WILLIAMSVILLE ROAD</u>																																														
Town, State, Zip <u>Oakham, MA 01068</u>				Town, State, Zip <u>HUBBARDSTON, MA 01452</u>																																															
Phone <u>(508) 882-3636</u>				Phone <u>(978) 270-9916</u>																																															
Type of Preparer <u>LF</u>				Mass. Lic. Harvester # <u>209-587 (MULTIPLE)</u>																																															
*Mass. Forester License # <u>431</u>				*This information may be supplied after the plan is approved, but before work begins.																																															
*Required for land under Ch61, Ch61A or Forest Stewardship																																																			
<b>Best Management Practices</b>	<b>Stream Crossings</b>				<b>Harvesting in Wetlands</b>																																														
	Indicate location on map	SC-1	SC-2	SC-3	SC-4	Indicate location on map	HW-1	HW-2	HW-3	HW-4																																									
	Type of Crossing					Forest Type (see pg 2)																																													
	Existing Structure					Acres to be Harvested																																													
	Type of Bottom					Resid. Basal Area (>50%)																																													
	Bank Height (ft)																																																		
	Stabilization																																																		
	<b>Wetland Crossings</b>				<b>Service Forester Comments</b>																																														
	Indicate location on map	WC-1	WC-2	WC-3	WC-4	<ul style="list-style-type: none"> <li><u>PLEASE NOTIFY DCR SERVICE FORESTER AT START OF OPERATION</u></li> <li><u>Maintain 50% BA within buffer strip</u></li> </ul>																																													
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Mitigation																																																			
Stabilization																																																			
<b>Filter Strips</b>																																																			
Indicate location on map	FS-1	FS-2	FS-3	FS-4																																															
Width (50', 100', or VA)	VA	VA																																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Type of Preparer</th> <th>Type of Crossing</th> <th>Stabilization</th> <th>Mitigation</th> <th>Type of Bottom</th> <th>Note:</th> </tr> </thead> <tbody> <tr> <td>LF Mass. Lic. For.</td> <td>CU Culvert</td> <td>SE Seed</td> <td>FR Frozen</td> <td>LE Ledge</td> <td>Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin.</td> </tr> <tr> <td>TH Lic. Tim. Har</td> <td>BR Bridge</td> <td>MU Mulch</td> <td>DR Dry</td> <td>ST Stony</td> <td>Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits.</td> </tr> <tr> <td>TB Timber Buyer</td> <td>FO Ford</td> <td>CO Corduroy</td> <td>OT Other</td> <td>MU Mud</td> <td>Consult MA Forestry BMP Manual for further information.</td> </tr> <tr> <td>LO Landowner</td> <td>PO Poled</td> <td>ST Stone</td> <td></td> <td>GR Gravel</td> <td></td> </tr> <tr> <td>OT Other</td> <td>OT Other</td> <td>HB Hay Bales</td> <td>OT Other</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>OT Other</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom	Note:	LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge	Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin.	TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits.	TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Consult MA Forestry BMP Manual for further information.	LO Landowner	PO Poled	ST Stone		GR Gravel		OT Other	OT Other	HB Hay Bales	OT Other					OT Other			
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If Other (OT) is used in any category an explanation must be given on an attached narrative page

pg 3 of 5

## Forest Products

## Products to be Harvested\*

Species	Mbf/Cds		Mbf/Cds
White Pine		Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	60.7
Hemlock		Black Oak	21.6
Spruce		White Oak	0.8
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	83.1
Beech		Cordwood (Cds)	111
White Birch		SW Pulp (Tons)	
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

\*Note: Volumes indicated in the Plan are as reported by the plan preparer and have not been independently verified by the service forester upon approval. Mbf = thousand board feet.

## Landowner

## Landowner Signature

The most important information on a cutting plan is the Landowner's objective, as this will determine which trees will be harvested and which will remain; this decision will also determine the future condition of the forest for decades to come. After having read the Massachusetts Forest Cutting Plan Information Sheet on page one, indicate your objective by checking the appropriate box below.

 LT - Long-term Forest Management

Planned management of the forest to achieve one or more of the following objectives: produce immediate and maximize long-term income, enhance wildlife habitat, improve recreational opportunities, protect soil and water quality, or produce forest specialty products.

 ST - Short-term Harvest

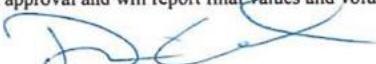
Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

I (we) have read the Massachusetts Cutting Plan Information Sheet, and am aware of my (our) management options.

I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

I (we) certify that I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two hundred feet of the area to be harvested.

I (we) understand that the volumes in this plan have not been independently verified by the service forester upon approval and will report final values and volumes to the Director or his/her agent if the final figures differ from those reported.

  
Signature of landowner(s)

8-16-18  
Date

## Service Forester

Determination and Status			Final Report and Comments		
Approved	Disapproved	Expires			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8/28/20			
 Signature of Service Forester/Director's Agent SITEWALK W/ K.C. 8/30/18			I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.		
Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires	Ser. For. Ints.	 Signature of Service Forester/Director's Agent
Amendment	App 1 <input type="checkbox"/>	Dis 1 <input type="checkbox"/>	App 2 <input type="checkbox"/>	Dis 2 <input type="checkbox"/>	2/8/19 Date

Forest Types					Designation of Trees		Type of Cut		Source of Regeneration	
WP White Pine	HK Hemlock	OM Mixed Oak	CT Cut Tree	SH Shelterwood	Intermediate Harvests:		AD Advanced			
WK WP/Hem	HH Hem/Hdwd.	RM Red Maple	LT Leave Tree	ST Seed Tree	CT Commercial Thin		SE Natural Seed			
WH WP/Hdwd	BC Blck Cherry	BE Beech	SB Stand Boundary	CC Clear Cut	NT Non Com Thin		PL Plant			
WO WP/Oak	BB Bee/Bir/Map	SF Spruce/Fir	OT Other	SE Selection	Non-Standard Systems: <sup>*</sup>		CO Coppice			
RP Red Pine	OH Oak/Hdwd	SM Sugar Maple	Landowner Objective	SA Salvage	HG Highgrade*		DS Direct Seed			
SR Red Spruce	OR N Red Oak	PP Pitch Pine	LT Long-term Mgt.	SN Sanitation	DL Diameter Limit*		OT Other			
			ST Short-term Har.	OT Other*						

\*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page

pg 4 of 5

# Forest Cutting Plan

Narrative Page (Effective Date: 3/15/16)

Use this page to provide further explanation or if

Other (OT) was used in any category on pages 3 or 4.

Landowner DCR - DWSP  
 Town Barre  
 File Number 021-9502-19

BMPs

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

This is a salvage harvest of dead and dying oak caused by a gypsy moth infestation. ST-1 consists of 3 openings that are 2.6, 3.4, and 3.2 acres (see stand map) in size. ST-2 consists of thinning areas adjacent to the openings and along skid trails.

Designation of Trees

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4. Additional narrative description may be added on a separate page.

Describe Trees to be Cut				Describe Trees to be Left				% BA/AC	
Stand No.	Species	Size	Quality	Species	Size	Quality	Cut	Left	

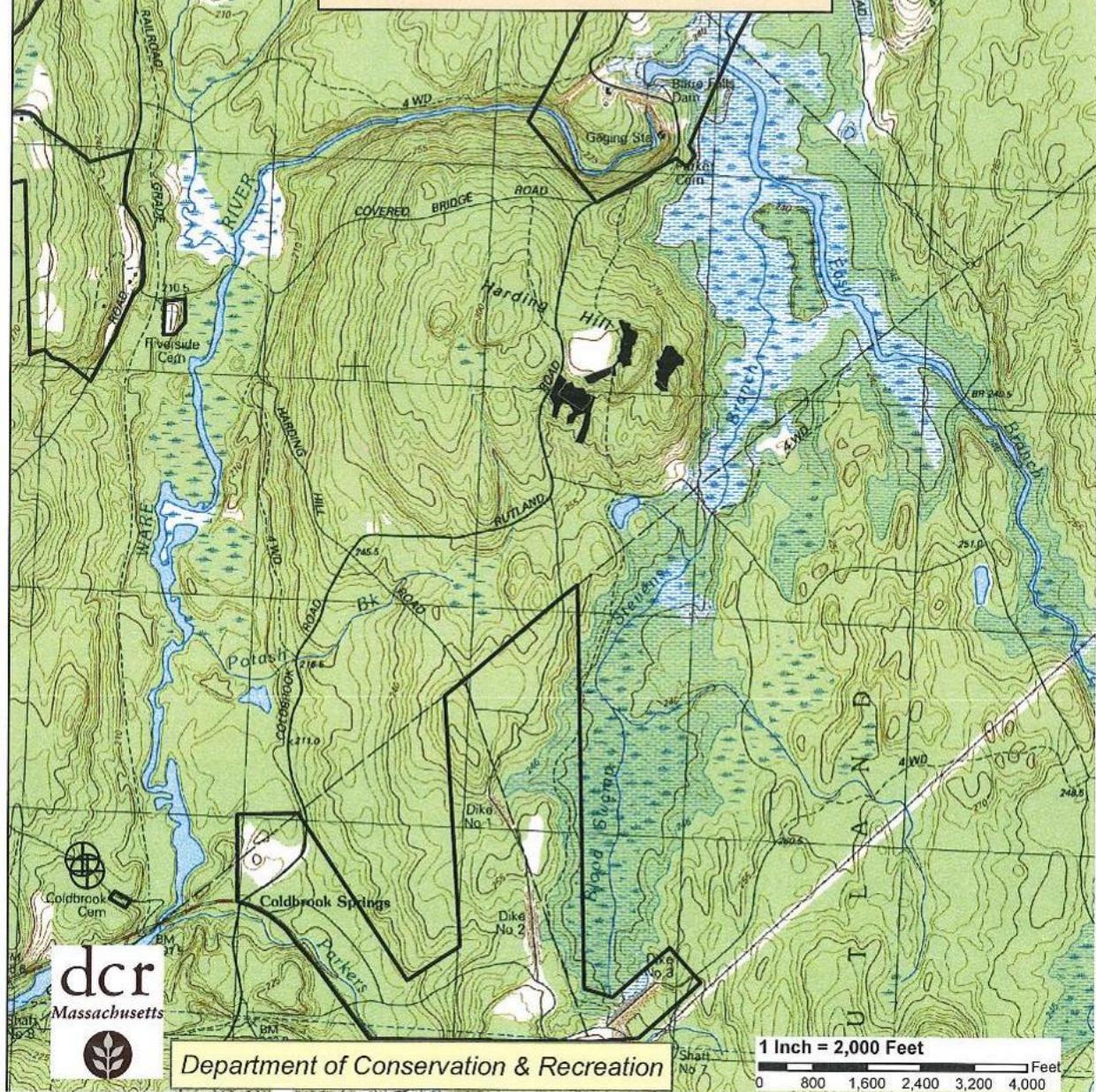
Regeneration & Future Condition

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

Stand No.      Source of Regeneration (ex. AD, SE)      How will Regeneration be obtained/protected?  
 If using AD - Describe the species present and how the regeneration will be protected  
 If using SE - Describe the source of the seed and the number of seed trees/acre


Stand No.	Desired Future Condition
Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory	

Coldbrook Rd, Barre, MA  
Lot # S3WR  
Harding Hill Gypsy Moth Salvage  
15.2 Acres  
MA DCR  
Division of Water Supply Protection  
Prepared by Kenneth W Canfield 8/14/18  
Data Sources: MassGIS, DCR & EOEEA

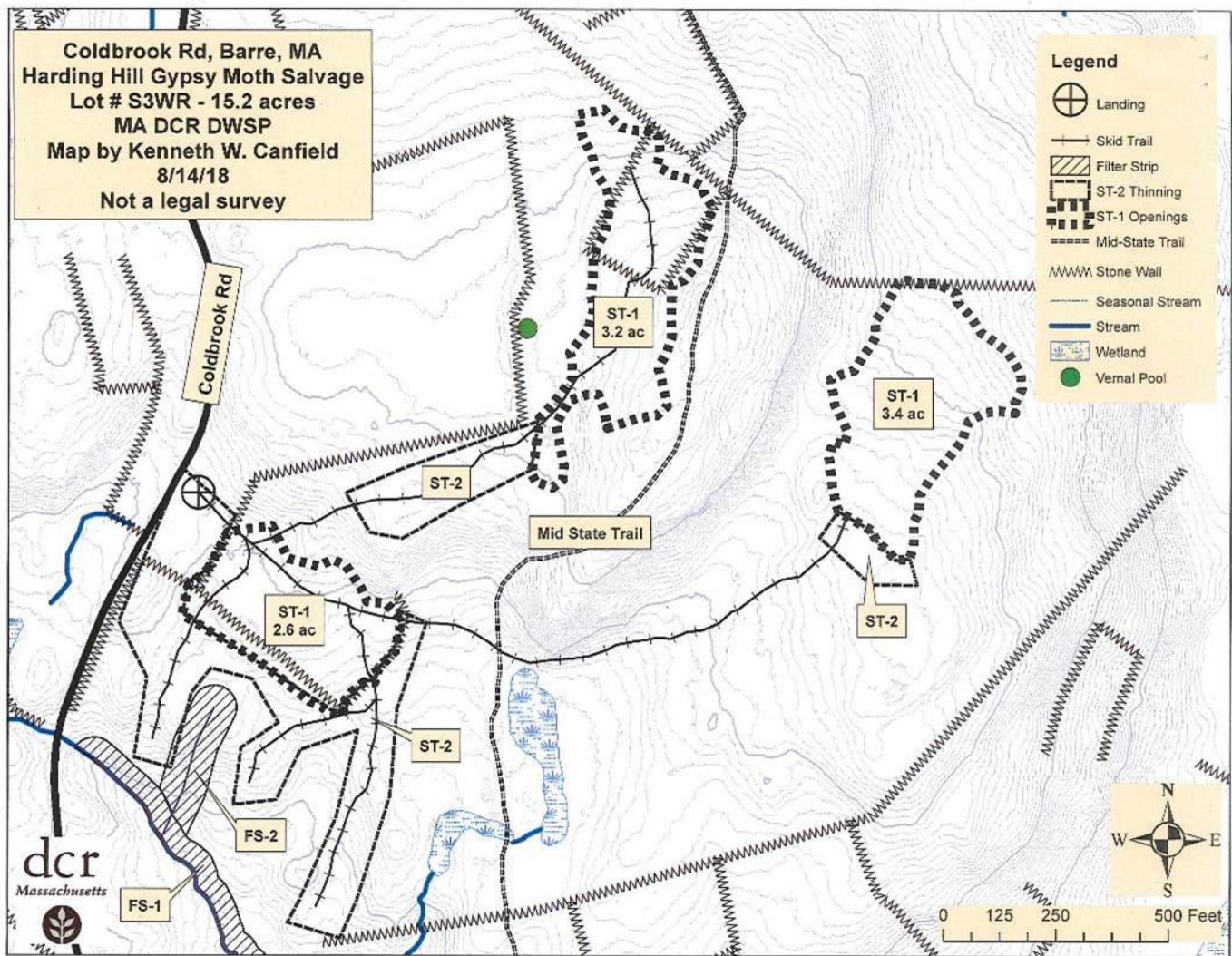


Department of Conservation & Recreation

**Coldbrook Rd, Barre, MA**  
**Harding Hill Gypsy Moth Salvage**  
**Lot # S3WR - 15.2 acres**  
**MA DCR DWSP**  
**Map by Kenneth W. Canfield**  
**8/14/18**  
**Not a legal survey**

**Legend**

- Landing
- Skid Trail
- Filter Strip
- ST-2 Thinning
- ST-1 Openings
- Mid-State Trail
- Stone Wall
- Seasonal Stream
- Stream
- Wetland
- Vernal Pool





COMMONWEALTH OF MASSACHUSETTS  
Department of Conservation and Recreation  
Division of State Parks and Recreation

FILE # 021-9502-19

## FOREST CUTTING PLAN CERTIFICATE

**W**

Post this in a conspicuous place within the area in which the harvesting operation is to take place.

DCR

This certifies that Division of Water Supply Protection 485 WARE ROAD  
(Name of Owner) BELCHERTOWN MA 01007 in accordance with the  
(Address)

provision of M.G.L. Chapter 132, Section 40-46, filed in CLINTON with the Dept. of Conservation  
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the  
Coldbrook Road lot.

Approval Date 8/31/2018

ISSUED BY:

Director's Agent CHRIS CAPONE

Priscilla E. Gelgis, Director  
Division of State Parks and Recreation

DCR Phone No. (857) 406-0175