

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

**Project Title: Harding Hill Gypsy Moth Salvage 2**

<b>DWSP Harvest Permit Number: S4WR</b>
<b>DCR Forest Cutting Plan File Number: 021-9665-19</b>

**Site Information**

<b>Watershed:</b> Ware River Watershed	<b>Town(s):</b> Barre
<b>Acres:</b> 26	<b>Nearest Road:</b> Coldbrook Rd
<b>Natural Heritage Atlas overlap?:</b> No	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> Mixed Oak	<b>ACEC<sup>1</sup>?:</b> No
<b>Soils:</b> 910C Woodbridge-Paxton association, 902E Charlton-Paxton association	
<b>Wetland Resources:</b> Several seasonal streams and a wetland are near the harvest area.	
<b>Vernal Pools present or within 200 feet of harvest :</b> Yes – several vernal pools present outside of the harvest area, but within 200 feet of the edge of the harvest.	

**Harvest Information**

<b>Harvest Start Date:</b> 9/21/20	<b>Harvest End Date:</b> 6/14/21
<b>Number of Wetland Crossings:</b> None	<b>Number of Stream Crossings:</b> 1

**Best Management Practices Applied**

<b>Stream Crossings</b>	There is one stream crossing.
<b>Filter Strips</b>	There is harvesting in a filter strip.
<b>Wetland Crossings</b>	There are no wetland crossings.
<b>Harvesting in Wetlands</b>	There is no harvesting in wetlands.

<b>DWSP Forester supervising this harvest</b>
<b>Name:</b> Ken Canfield
<b>Forester License #</b> 431
<b>Phone #:</b> 508-882-3636 X 1603
<b>Email:</b> <a href="mailto:kenneth.canfield@state.ma.us">kenneth.canfield@state.ma.us</a>

<sup>1</sup>ACEC: Area of Critical Environmental Concern

## **NARRATIVE**

### **General Description/Forest Composition/History:**

The harvest area is located West of Coldbrook Rd and south of Covered Bridge Rd in Barre. This oak stand was last thinned in 1997. Recent defoliation by Gypsy 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, eastern white 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 gypsy moth caterpillars. A combination of stress from a multi-year drought along with repeated extreme gypsy 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 five patches that are 0.9, 1.0, 2.8, 4.2 and 4.6 acres in size. There is also approximately 12.5 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.

### **Wildlife/Rare or Endangered Species:**

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

**FIGURES**

**Figure 1 Forest Cutting Plan**

Figure 1 Forest Cutting Plan

# Forest Cutting Plan

and Notice of Intent under M.G.L.  
Chapter 132 – The Forest Cutting  
Practices Act, 304 CMR 11.00  
(Effective Date: 3/15/16)

DEC 10 2018

## For DCR Use Only:

File Number 021-91605-19 Case No.           
Date Rec'd 12-10-18 Nat. Hert.           
Earliest Start 12-20-18 Pub. Dr. Wat.           
River Basin CHUKOKEE ACEC           
Gen. Obj. LT

## Location

Town Barre  
Road Coldbrook Rd  
Acres 26.0 Proposed Start Date 12/18  
Vol. MBF 102 Vol. Cds. 275 Vol. Tons         

## Plan Preparer

Name Kenneth W. Canfield  
Address 578 Old Turnpike Rd  
Town, State, Zip Oakham, MA 01068  
Phone (508) 882-3636  
Type of Preparer LF  
\*Mass. Forester License # 431  
\*Required for land under Ch61, Ch61A or Forest Stewardship

## Landowner

Name DCR Division of Water Supply Protection  
Mailing Address 485 Ware Rd  
Town, State, Zip Belchertown, MA 01007  
Phone (413) 323-6921  
Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ \*Case #           
FSC ☐ CR ☐ CR Holder

## Licensed Timber Harvester\*\*

Name FBA (FRANK CAUNARD)  
Address 81 SIBLEY RD  
Town, State, Zip NEW BRANFORD, MA 01531  
Phone (413) 477-0083  
Mass. Lic. Harvester # 2021-5610  
\*\*This information may be supplied after the plan is approved, but before work begins.

## Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing	BR			
Existing Structure	N			
Type of Bottom	ST			
Bank Height (ft)	<1'			
Stabilization	CO			

## Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing				
Mitigation				
Stabilization				

## Filter Strips

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or VA)	VA	VA		

## Harvesting in Wetlands

Indicate location on map	HW-1	HW-2	HW-3	HW-4
Forest Type (see pg 2)				
Acres to be Harvested				
Resid. Basal Area (>50%)				

## Service Forester Comments

PLEASE NOTIFY DCR SERVICE  
FORESTER AT START OF OPERATION

Site Information

Best Management Practices

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud
LO Landowner	PO Poled	ST Stone		GR Gravel
OT Other	OT Other	HB Hay Bales		OT Other
		OT Other		

Note:  
Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin. Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.

If Other (OT) is used in any category an explanation must be given on an attached narrative page

## Products to be Harvested\*

Species	Mbf/Cds		Mbf/Cds
White Pine		Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	70.3 Mbf
Hemlock		Black Oak	31.7 Mbf
Spruce		White Oak	
Other Sftwd.		Other Hdw.	
White Ash		Total Mbf	102 Mbf
Beech		Cordwood (Cds)	275
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.

## Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	OM	OM		
Acres	13.5	12.5		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SA	SA		
Source of Regeneration	SE	SE		

## 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)

Date

11-16-18

## Determination and Status

Approved	Disapproved	Expires
Cutting Plan <input checked="" type="checkbox"/>	<input type="checkbox"/>	12/10/20
Signature of Service Forester/Director's Agent		Date
12/17/18		
Extension	Expires	Ser. For. Ints.
<input checked="" type="checkbox"/>	2 <input type="checkbox"/> 12/10/21	RC 1
Amendment	App 1	Dis 1
	App 2	Dis 2
	<input type="checkbox"/>	<input type="checkbox"/>

## Final Report and Comments

I hereby certify that the above described Forest Cutting Plan and all relevant statutes have been substantially complied with.

Signature of Service Forester/Director's Agent

Date

12/10/21

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/Hdw	RM Red Maple	LT Leave Tree	ST Seed Tree	CT Commercial Thin	SE Natural Seed			
WH WP/Hdw	BC Black 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:	CO Coppice			
RP Red Pine	OH Oak/Hdw	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

# 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 021-9665-19

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 red, black, scarlet, and white oak. ST-1 and ST-2 are both mixed oak stands with red maple,

black birch, and American beech also present in the overstory. ST-1 is made up of five groups that are 0.9, 1.0, 2.8, 4.2, and 4.6 acres in size. The groups will resemble patch cuts or clearcuts with approximately 5 square feet per acre of scattered residual live trees. ST-2 is 12.5 acres with scattered dead or dying oaks that will be harvested. ST-2 will resemble a thinning. The access road from Coldbrook Rd to the southern landing is scheduled to be repaired/maintained prior to the start of the harvest by DCR-DWSP staff. If this work is completed prior to the beginning of the harvest the landing closer to Coldbrook Rd and the skid trail and stream crossing associated with it will not be established.

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.

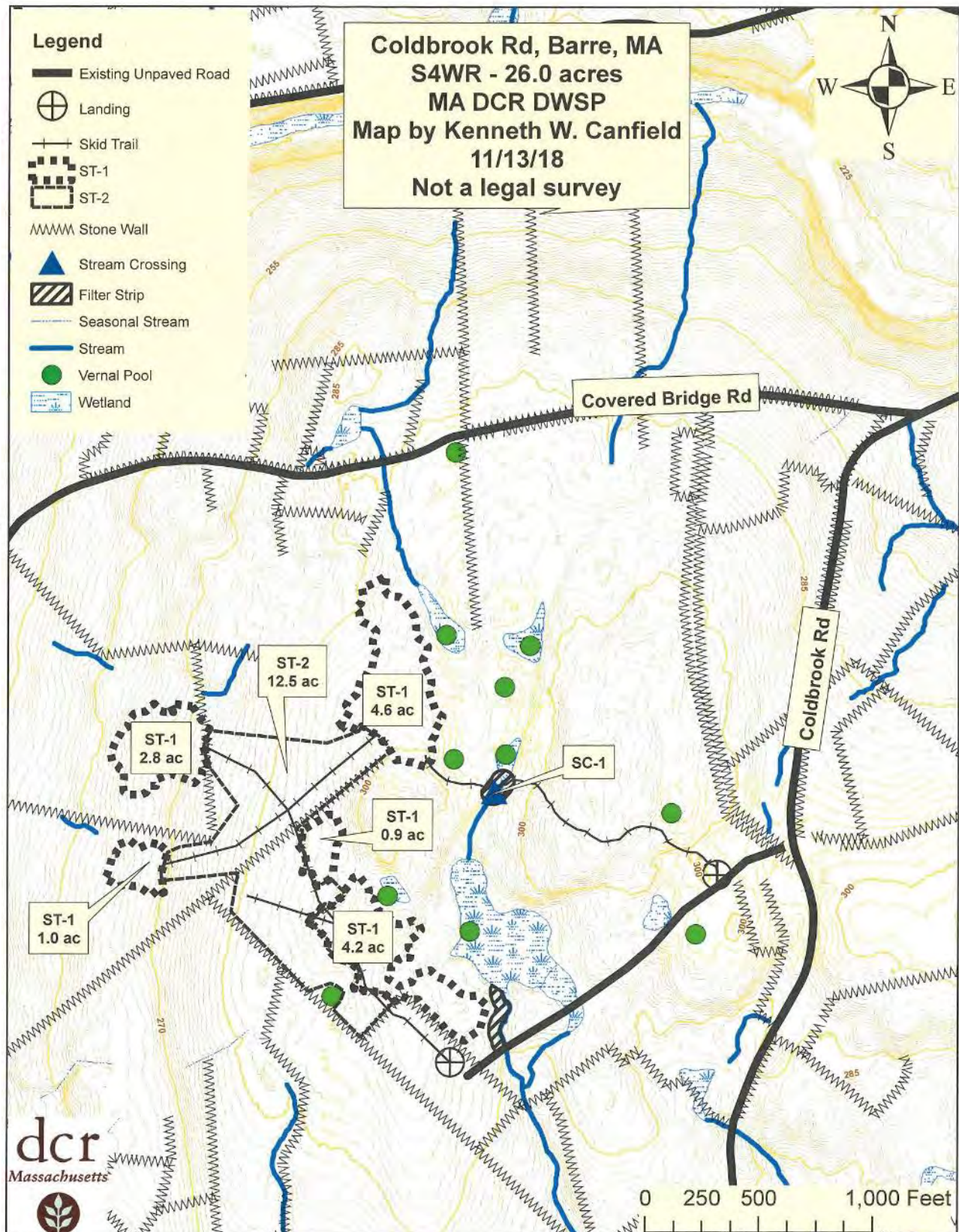
Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

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.

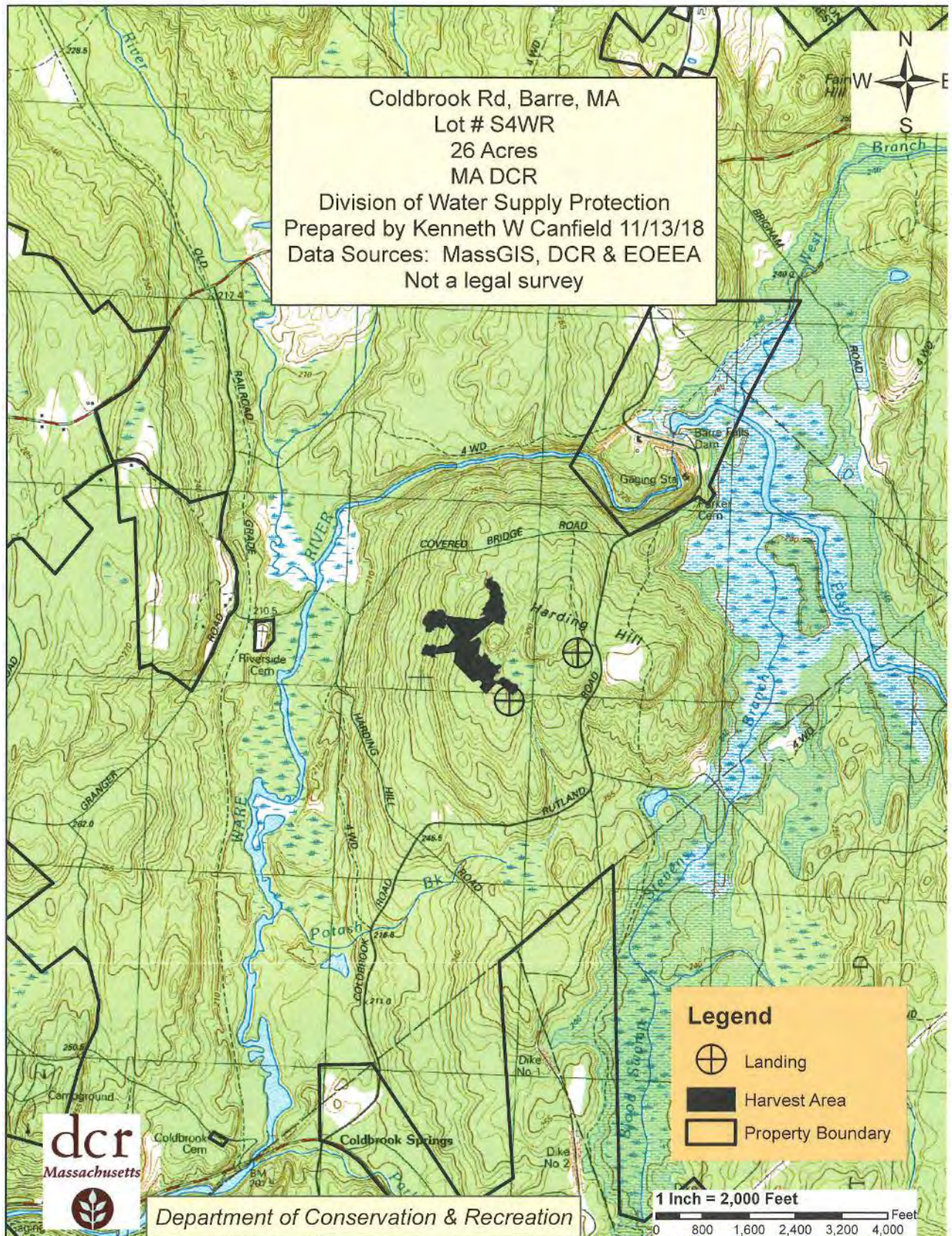
Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre
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Stand 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
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COMMONWEALTH OF MASSACHUSETTS  
Department of Conservation and Recreation  
Division of State Parks and Recreation

FILE # 021-9665-19

W

## FOREST CUTTING PLAN CERTIFICATE

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

This certifies that DCR DWSP 485 WARE ROAD,  
(Name of Owner) (Address) BELCHERTOWN, MA in accordance with the  
01007

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 lot.  
ROAD

Approval Date 12/17/18

Director's Agent CHRIS CAPONE

DCR Phone No. (857) 406-0175

ISSUED BY:

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