

**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 2**

DWSP Harvest Permit Number: S4WR

DWSP Proposal ID: WR-19-20-S, WR-19-20-3

DCR Forest Cutting Plan File Number: 021-9665-19

***Site Information***

Watershed: Ware River Watershed

Town(s): Barre

Acres: 26

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 – several vernal pools present outside of the harvest area, but within 200 feet of the edge of the harvest.

***Harvest Information***

Harvest Start Date: 9/21/20

Harvest End Date: 6/14/21

Number of Wetland Crossings: None

Number of Stream Crossings: One

***Best Management Practices Applied***

Stream Crossings: There is one stream crossing.

Filter Strips: There is 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***

T 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 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, 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 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 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.

### ***Rare or Endangered Species***

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

Figures  
Figure 1. Final 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 **DEC 10 2018**  
(Effective Date: 3/15/16)

**For DCR Use Only:**

File Number 021-9665-19 Case No. \_\_\_\_\_  
Date Rec'd 12-10-18 Nat. Hert. N  
Earliest Start 12-20-18 Pub. Dr. Wat. Y  
River Basin CHUOPEE ACEC N  
Gen. Obj. LT

Site Information	<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>26.0</u> Proposed Start Date <u>12/18</u>	Town, State, Zip <u>Belchertown, MA 01007</u>
	Vol. MBF <u>102</u> Vol. Cds. <u>275</u> Vol. Tons _____	Phone <u>(413) 323 - 6921</u>
	<b>Plan Preparer</b>	Ch61 <input type="checkbox"/> 61A <input type="checkbox"/> 61B <input type="checkbox"/> Stew <input type="checkbox"/> *Case # _____
	Name <u>Kenneth W. Canfield</u>	FSC <input type="checkbox"/> CR <input type="checkbox"/> CR Holder _____
	Address <u>578 Old Turnpike Rd</u>	<b>Licensed Timber Harvester**</b>
	Town, State, Zip <u>Oakham, MA 01068</u>	Name <u>FBA (GRAID CAUND)</u>
	Phone <u>(508) 882-3636</u>	Address <u>81 SIBLEY RD</u>
Type of Preparer <u>LF</u>	Town, State, Zip <u>NEW BRANTREE, MA 01531</u>	
*Mass. Forester License # <u>431</u>	Phone <u>(413) 477-0083</u>	
*Required for land under Ch61, Ch61A or Forest Stewardship	Mass. Lic. Harvester # <u>2021-5610</u>	
	**This information may be supplied after the plan is approved, but before work begins.	

FINAL

Best Management Practices	<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	BR	Forest Type (see pg 2)	
	Existing Structure	N	Acres to be Harvested	
	Type of Bottom	ST	Resid. Basal Area (>50%)	
	Bank Height (ft)	<1'		
	Stabilization	CO		
	<b>Wetland Crossings</b>		<b>Service Forester Comments</b>	
	Indicate location on map	WC-1 WC-2 WC-3 WC-4	<u>PLEASE NOTIFY DCR SERVICE FORESTER AT START OF OPERATION</u>	
	Length of Crossing			
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			

<b>Codes</b>	<b>Type of Preparer</b>	<b>Type of Crossing</b>	<b>Stabilization</b>	<b>Mitigation</b>	<b>Type of Bottom</b>	<b>Note:</b>
	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	

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

**Forest Products**

**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	31.7Mbf
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		<b>Total Mbf</b>	<b>102 Mbf</b>
Beech		<b>Cordwood (Cds)</b>	<b>275</b>
White Birch		<b>SW Pulp (Tons)</b>	
B & Y Birch		<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

**Stand Treatment**

\*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**

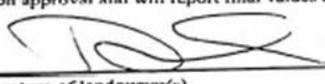
**Landowner Signature**

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)

11-16-18  
 Date

**Service Forester**

**Determination and Status**

Approved  Disapproved  Expires 12/10/20

Cutting Plan   12/17/18

  
 Signature of Service Forester/Director's Agent Date

Extension   12/10/21 CR1

Amendment App 1  Dis 1  App 2  Dis 2  1

**Final Report and Comments**

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

  
 Signature of Service Forester/Director's Agent Date 12/10/21

**Codes**

<b>Forest Types</b>	<b>Designation of Trees</b>	<b>Type of Cut</b>	<b>Source of Regeneration</b>
WP White Pine	CT Cut Tree	SH Shelterwood	AD Advanced
WK WP/Hem	LT Leave Tree	ST Seed Tree	SE Natural Seed
WH WP/Hdwd	SB Stand Boundary	CC Clear Cut	PL Plant
WO WP/Oak	OT Other	SE Selection	CO Coppice
RP Red Pine	Landowner Objective	SA Salvage	DS Direct Seed
SR Red Spruce	LT Long-term Mgt.	SN Sanitation	OT Other
	ST Short-term Har.		
		<b>Intermediate Harvests:</b>	
		CT Commercial Thin	
		NT Non Com Thin	
		<b>Non-Standard Systems:</b>	
		HG Highgrade*	
		DL Diameter Limit*	
		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 021-9605-19

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 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.~~

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.

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

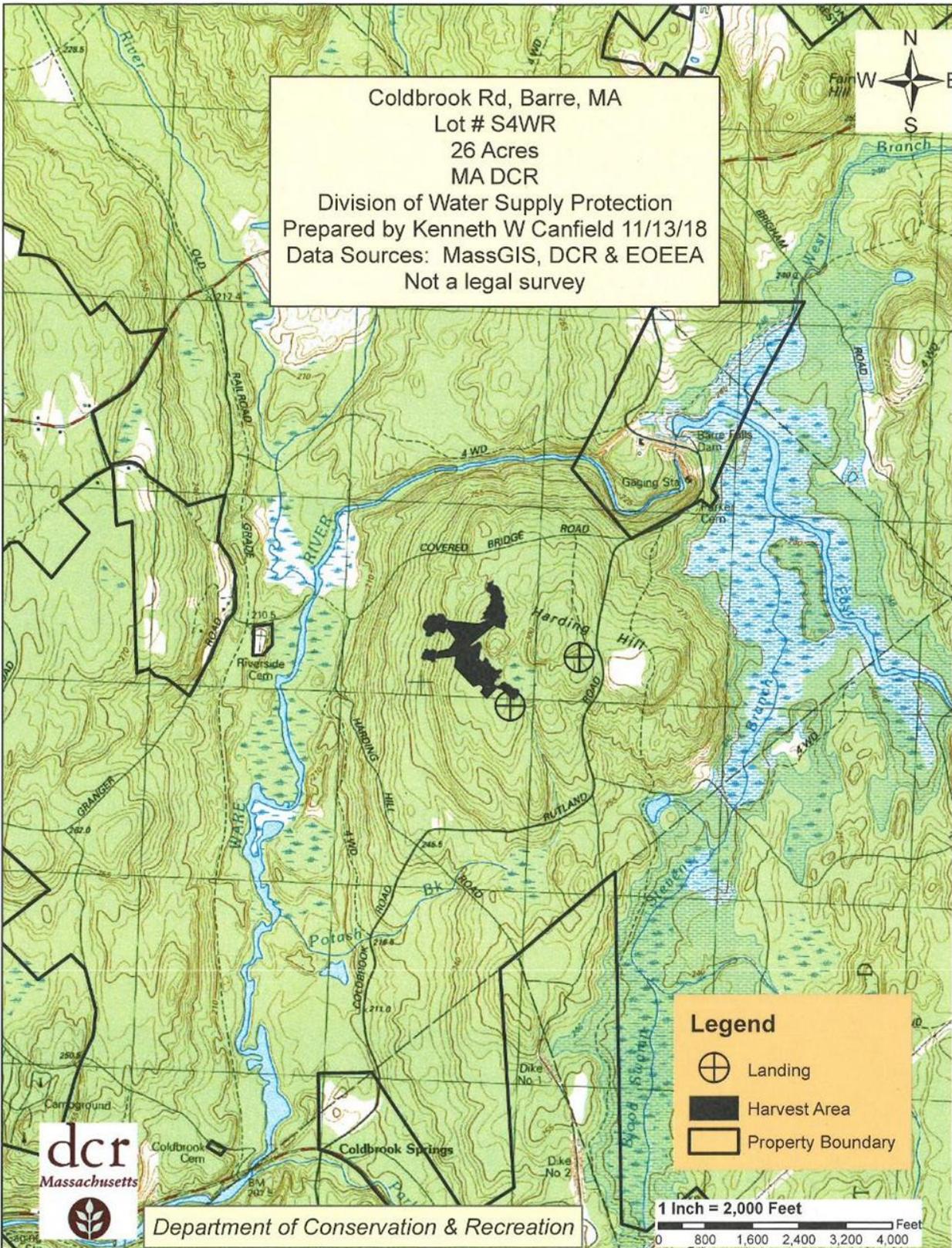
Regeneration & Future Condition

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.

<b>Stand No.</b>	<b>Source of Regeneration</b> (ex. AD, SE)	<b>How will Regeneration be obtained/protected?</b> 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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<b>Stand No.</b>	<b>Desired Future Condition</b> 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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Coldbrook Rd, Barre, MA  
Lot # S4WR  
26 Acres  
MA DCR  
Division of Water Supply Protection  
Prepared by Kenneth W Canfield 11/13/18  
Data Sources: MassGIS, DCR & EOEEA  
Not a legal survey



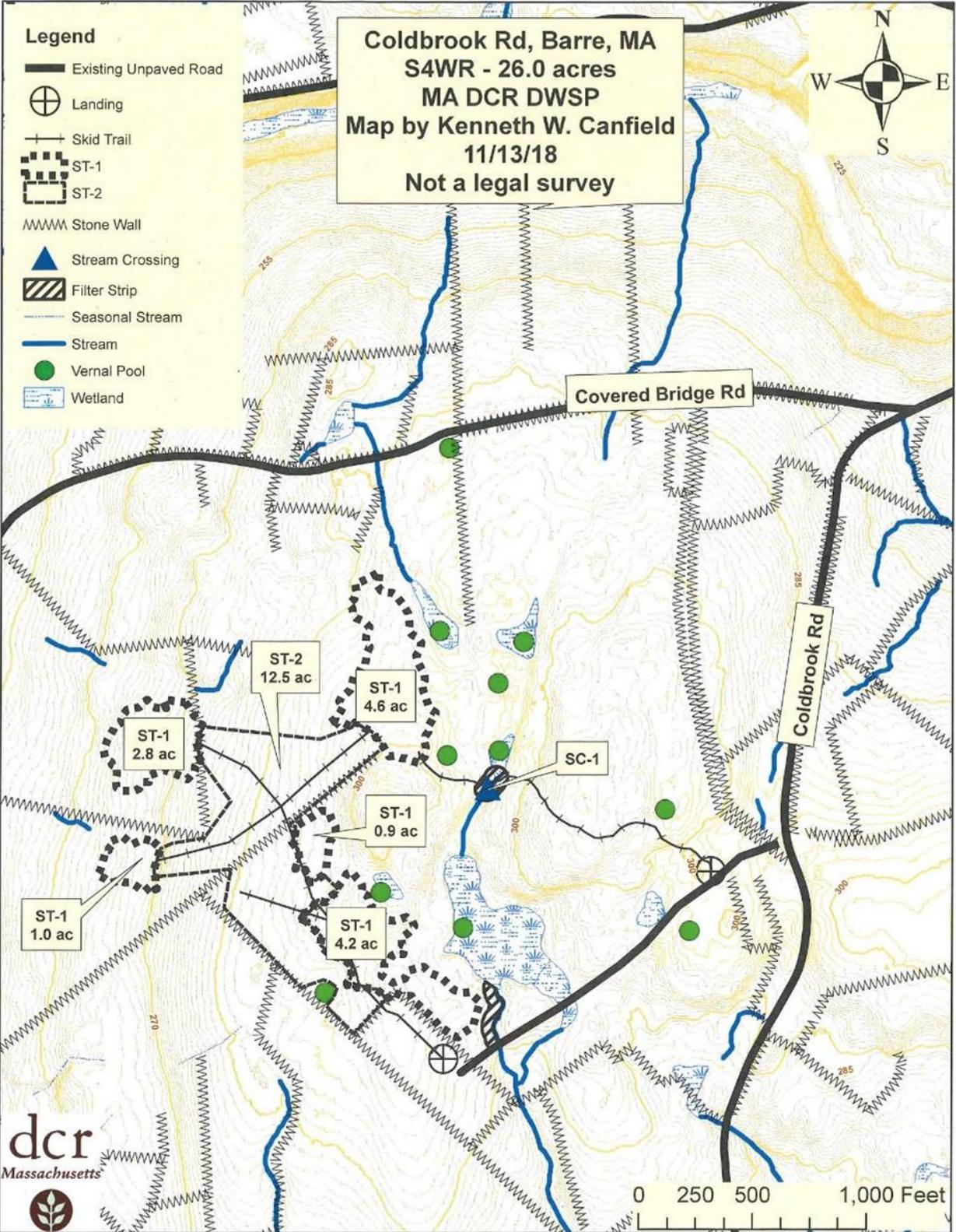
**Legend**

- ⊕ Landing
- Harvest Area
- Property Boundary



Department of Conservation & Recreation





dc



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

FILE # 021-9665-19

# FOREST CUTTING PLAN CERTIFICATE

# W

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

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

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 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