

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

**Project Title:** Coldbrook Rd/Rail Trail

<b>DWSP Harvest Permit Number:</b> WR 4388
<b>DCR Forest Cutting Plan File Number:</b> 222-7894-16

**Site Information**

<b>Watershed:</b> Ware River	<b>Town(s):</b> Oakham
<b>Acres:</b> 23	<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> White pine -oak, Mixed oak, Red pine	<b>ACEC?:</b> No
<b>Soils:</b> Most of the lot is on 253D and E Hinckley loamy sand, excessively drained. There is also 254B Merrimac fine sandy loam, somewhat excessively drained.	
<b>Wetland Resources:</b> Lot is adjacent to wetlands, Parker Brook, and the Ware River.	
<b>Vernal Pools:</b> Yes	

**Harvest Information**

<b>Harvest Start Date:</b> 3/1/16	<b>Harvest End Date:</b> 3/15/16
<b>Number of Wetland Crossings:</b> None	<b>Number of Stream Crossings:</b> None

**Best Management Practices Applied**

<b>Stream Crossings</b>	There are no stream crossings.
<b>Filter Strips</b>	There are no filter strips.
<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> Kenneth W. Canfield	
<b>Forester License #:</b> 431	
<b>Phone #:</b> 508-882-3636 ext.1603	

## **NARRATIVE**

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

The harvest area lies between Coldbrook Rd, the Central MA Rail Trail (CMRT) and Parker Brook/Ware River. There is a steep esker that bisects the harvest area.

Most of the harvest area is a white pine oak forest. There is a 3 acre mixed oak stand located in the middle of the harvest area and a 2 acre Red Pine stand directly adjacent to Coldbrook Rd. Species present are white pine, red, black, scarlet, and white oak, red maple, hemlock, black cherry, quaking aspen, and paper birch.

The white pine stand is over-crowded, leading a loss of vigor in many of the overstory trees. The form of the overstory white pine and red maple is generally poor. The oak that is present is generally more vigorous and better formed. Dense and diverse regeneration is present throughout, with White pine and red maple seedlings being the most abundant. Oak and hemlock seedlings are also present.

The regeneration in the oak stand is similar to that in white pine stand. The overstory is a good mix of red, black, scarlet, and white oak. The overstory trees are generally better formed, though there is some storm damage in some of the tops.

The Red Pine stand along Coldbrook Rd was planted in the 1930's, and is experiencing mortality due to disease and an invasive insect. The regeneration in this stand is comprised of white pine and red maple, with some oak and hemlock.

Invasive barberry and buckthorn are present, particularly in the red pine stand and adjacent to the CMRT.

The soil is excessively 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. In order to achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large mature trees). In addition, the forest should be vigorous; actively growing and regenerating. A forest in this condition is resilient to and quickly recovers from small and large scale disturbances such as disease, insect infestation, ice storms and hurricanes.

This area was chosen because the red pine stand is experiencing mortality and falling apart, and because overstory trees in the white pine and oak stands are losing vigor. The dense regeneration in these stands was also starting to stagnate. Providing the regeneration that is present with more sunlight and space to grow will ensure that there is a healthy and diverse forest in the future.

### **Silvicultural Objectives:**

The main purpose of this harvest is to diversify and regenerate the forest, and to remove poorly formed trees, particularly poorly formed white pine. Small (up to 1/2 of an acre) groups of trees will be removed, generally in areas where the overstory has a high percentage of poorly formed white pine and where other species have the lowest vigor and poorest form.

Within the red pine stand, almost all of the living red pine stems will be removed before they die. The overstory trees present in the stand are almost 100% red pines, so the resulting harvest will be a small

clearcut. The regeneration present will be protected as much as possible to start a new stand comprised of native species and to provide as much of a visual buffer to Coldbrook Rd as possible.

These treatments should increase the diversity of species and will increase the age and structural diversity of the forest as a whole.

The town DPW and Tree Warden have both visited the site and agreed that the dead and dying trees in the red pine stand pose a safety hazard to vehicles travelling on Coldbrook Rd. This is another reason to remove as many red pine stems as possible before more mortality occurs.

**Cultural Resources:**

This land has been determined to not be culturally or archeologically sensitive based on a review by the DCR Archaeologist. Standard practice dictates that every effort is made to avoid disturbing stone walls and other cultural resources. There are no walls on this lot that will need to be crossed.

**Wildlife/Rare or Endangered Species:**

There are several known vernal pools adjacent to the harvest area. The vernal pools have been mapped and buffered from timber harvesting to provide adequate protection to the species that utilize it, and in accordance with the Massachusetts Forestry Best Management Practices Manual and the Division of Water Supply Protection Comprehensive Land Management Plan.

A variety of wildlife such as deer, turkey, coyote, yellow jackets, and moose are known to frequent the lot and beaver and otter are in adjacent wetlands. Most snags and trees with stick nests, dens or unusual wildlife habitat characteristics will be retained.

## **FIGURES**

**Figure 1 Final Forest Cutting Plan**

**Figure 2 Pre-Harvest photograph taken from marked point 1 on 11/16/15**

**Figure 3 Post-Harvest photograph taken from marked point 1 on 3/30/16**

**Figure 4 After one growing season photograph taken from marked point 1 on 7/22/16**

**Figure 5 After two growing season photograph taken from marked point 1 on 7/12/17**

Figure 1: Final Cutting Plan

# Forest Cutting Plan

and Notice of Intent under M.G.L.  
Chapter 132 – The Forest Cutting  
Practices Act, 304 CMR 11.00 **NOV 09 2015**  
(Effective Date: 1/1/04)

**For DCR Use Only:**

File Number 222-7894-110 Case No. \_\_\_\_\_  
Date Rec'd 11-9-15 Nat. Hert. Yes /  
Earliest Start 11-24-16 Nat. Hert. Imp. No - See attached  
River Basin Chicopee Pub. Dr. Wat. Yes  
Gen. Obj. LT ACEC No

**FINAL**

Site Information

**Location**

Town Oakham  
Road Coldbrook Rd  
Acres 23 Proposed Start Date 12/1/15  
Vol. MBF 31.5 Vol. Cds. 105 Vol. Tons 330

**Plan Preparer**

Name Kenneth W. Canfield  
Address DCR Division of Water Supply Protection  
578 Old Turnpike Rd  
Town, State, Zip Oakham, MA 01068  
Phone (508) 882-3636 ext. 1603  
Type of Preparer Mass Licensed Forester  
\*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 #  
CR  CR Holder

**Licensed Timber Harvester\*\***

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Town, State, Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Mass. Lic. Harvester # \_\_\_\_\_

\*\*This information may be supplied after the plan is approved, but before work begins.

Best Management Practices

**Stream Crossings**

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing				
Existing Structure				
Type of Bottom				
Bank Height (ft)				
Stabilization				

**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)				

**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**

Notify DCR Service Forester when harvest begins  
See attached NHEBP renew

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

**FINAL**

Forest Products

**Products to be Harvested\***

Species	Mbf/Cds		Mbf/Cds
White Pine	3.9 M	Red Maple	
Red Pine	21.6 M	Sugar Maple	
Pitch Pine		Red Oak	4.8 M
Hemlock		Black Oak	0.9 M
Spruce		White Oak	0.3 M
Other Sftwd.		Other Hdwd.	
White Ash		<b>Total Mbf</b>	31.5
Beech		<b>Cordwood (Cds)</b>	105
White Birch		<b>SW Pulp (Tons)</b>	330
B & Y Birch		<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

\*Note: Volumes and values 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.

Stand Treatment

**Cutting Standards**

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	RP	WO	OM	
Acres	1.	18.6	2.9	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SA	SE	SE	
Source of Regeneration	SE	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 and values (Ch61 only) 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.

*[Handwritten Signature]*

Signature of landowner(s)

*11-6-18*

Date

Service Forester

**Determination and Status**

Approved Disapproved Expires

Cutting Plan   *11/9/2017*

*[Handwritten Signature]* *11/24/2015*  
Signature of Service Forester/Director's Agent Date

Extension 1  2  Expires Ser. For. Ints. *1*

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.

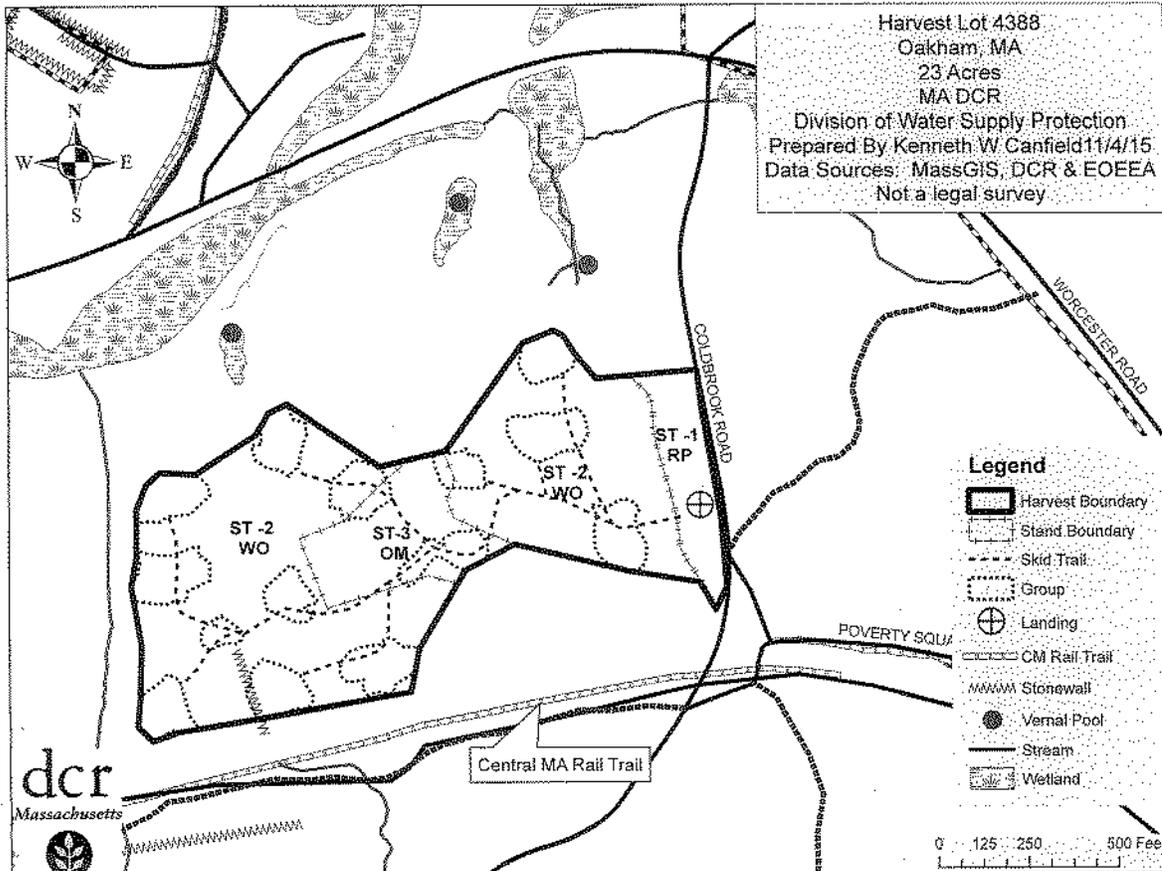
*[Handwritten Signature]* *3/22/2016*  
Signature of Service Forester/Director's Agent Date

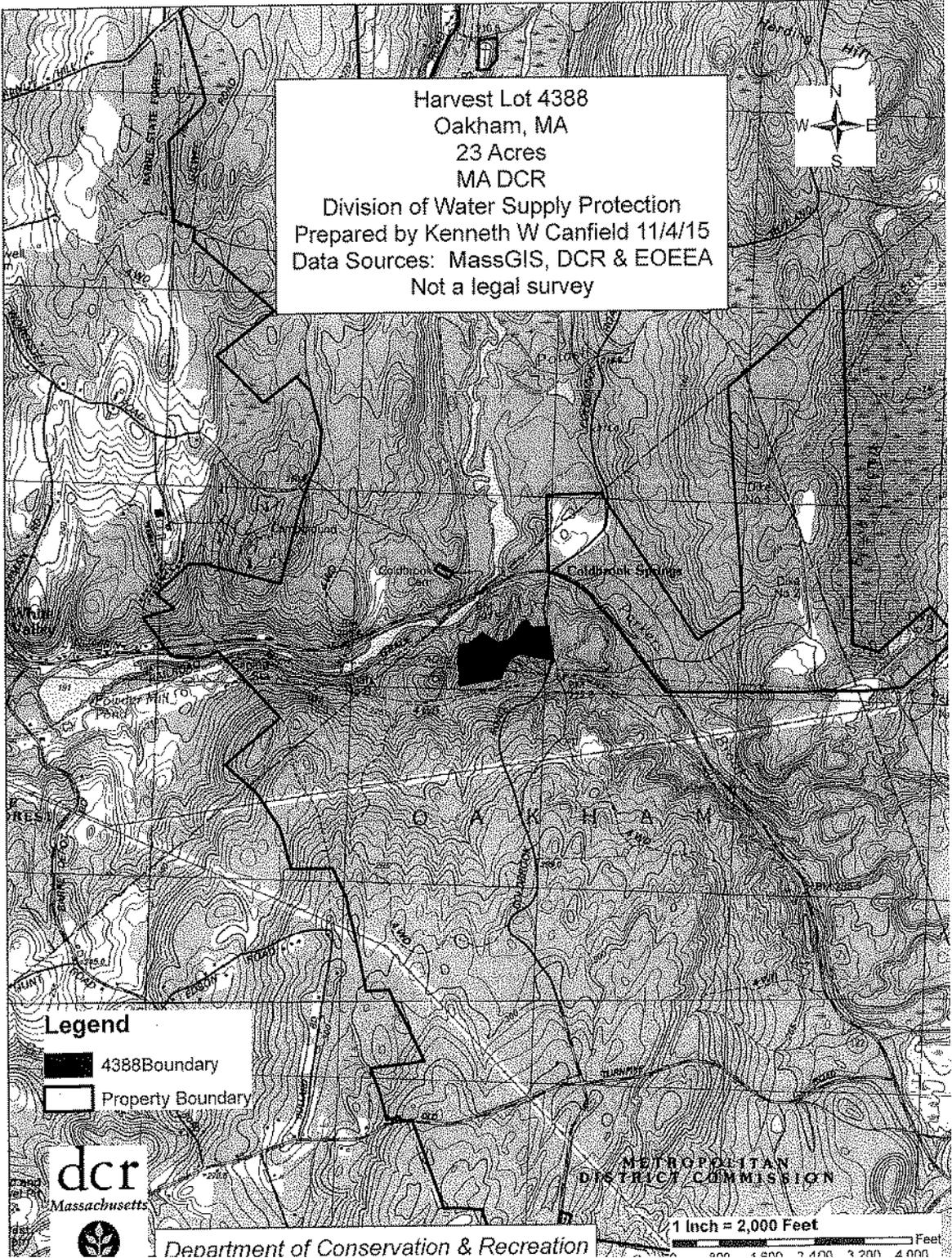
Codes

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

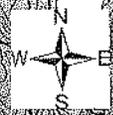
\*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page







Harvest Lot 4388  
Oakham, MA  
23 Acres  
MA DCR  
Division of Water Supply Protection  
Prepared by Kenneth W Canfield 11/4/15  
Data Sources: MassGIS, DCR & EOEEA  
Not a legal survey



**Legend**  
■ 4388Boundary  
□ Property Boundary



Department of Conservation & Recreation

1 inch = 2,000 Feet  
0 1000 2000 3000 4000 Feet



**TOWN OF OAKHAM**  
**HIGHWAY DEPARTMENT**

178 Barre Road  
Oakham, MA 01068  
Telephone / Fax  
508-882-5556

August 24, 2015

Kenneth Canfield  
Forester II  
DCR DWSP  
578 Old Turnpike Rd  
Oakham Ma 01068

Hi Ken,

As Highway Superintendent for the Town of Oakham I do not have any problem with you exceeding the buffer strip along Coldbrook Rd when removing the stand of Red Pine in question, removing said trees will eliminate a safety hazard for the town.

Sincerely ;  
C. Kevin Currier  
  
Town of Oakham  
Highway Superintendent

**Oakham Tree Warden**

mmbrunelle667@aol.com [mmbrunelle667@aol.com]

Sent: Tuesday, September 08, 2015 12:41 PM

To: Canfield, Kenneth (DCR)

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Ken Canfield  
Watershed Forester  
578 Turnpike Rd  
Oakham Ma

Dear Ken

Sorry to be getting back to you so late on this letter, things have been busy.

In regards to your up coming clear cut of diseased red pine on coldbrook rd. in the area known locally as coldbrook station. It would be in the towns best interest if you are able to remove all the red pine up to the edge of coldbrook rd. Leaving a 50 foot buffer of diseased trees will only require coming back at a later date to remove them after they die out, and there would be a real concern of them coming down in the road in storm or high wind conditions once the rest of the stand is removed.

If I can be of further assistance feel free to contact me

Sincerely

Michael Brunelle  
Tree Warden  
Town of Oakham  
508-882-3468



# Division of Fisheries & Wildlife

Jack Buckley, *Director*

Kate Marquis  
Department of Conservation and Recreation  
355 West Boylston St.  
Clinton, MA 01510

Cutting Plan No. 222-7894-16  
NHESP Tracking No. 15-35002  
Town Oakham  
Road Coldbrook Road  
Landowner DCR DWSP  
Preparer Kenneth Canfield  
Date November 23, 2015

Dear Kate,

The Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife ("the Division") has reviewed the above-referenced Forest Cutting Plan (hereinafter "the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(6)). Based on details of the Plan and information in the NHESP database, the Division does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in "Take" (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). Therefore, the Division does not require that the Plan be modified at this time.

Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact Brent Powers at (508) 389-6354.

Sincerely,

Thomas W. French, Ph.D.  
Assistant Director

Cc: Oakham Conservation Commission (via e-mail)





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

FILE # 222-7894-16

## 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 Rd  
(Name of Owner) (Address) Belchertown, MA in accordance with the  
01007

provision of M.C.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.

Approval Date 11/24/2015  
Director's Agent Kate Marquis  
DCR Phone No. (413) 992-8734

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

Figure 2: Pre-Harvest Photograph from marked photo point 1, taken 11/16/15



Figure 3: Post-Harvest Photograph from marked photo point 1, taken 3/30/16



Figure 4: After one growing season photograph from marked photo point 1, taken 7/22/16



Figure 5 After two growing season photograph taken from marked point 1 on 7/12/17

