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

### **Project Title:**

DWSP Harvest Permit Number: 5266	
DCR Forest Cutting Plan File Number: 321-8692-17	

#### **Site Information**

Watershed: Wachusett	Town(s): West Boylston			
Acres: 29	Nearest Road: River Road			
Natural Heritage Atlas overlap?: Yes	Public Drinking Water Supply Watershed?: Yes			
Forest Types: Northern red oak, white pine/oak	ACEC?: No			
Soils: Merrimac fine sandy loam, Canton fine sandy loam				
Wetland Resources: There are no wetlands within the sale area.				
<b>Vernal Pools:</b> There are no vernal pools.				

### **Harvest Information**

<b>DWSP Permit Start Date:</b> 04/12/17	DWSP Permit End Date: 06/28/19		
Number of Wetland Crossings: 0	Number of Stream Crossings: 0		

**Best Management Practices Applied** 

Stream Crossings	There are no stream crossing.	
Filter Strips	No trees are marked in the filter strip along the stream that forms the	
	southern boundary of this sale area.	
Wetland Crossings	There are no wetland crossings.	
Harvesting in Wetlands	No harvesting in wetlands will occur.	

DWSP Forester supervising this harvest
Name: Greg Buzzell
Forester License #: 025
Phone #: 978-792-7806 x317

#### **NARRATIVES**

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

Red oak and white pine are the two dominant species in this working unit along with far less amounts of white oak and red maple. A few hemlock can be found in the far south end on the steep slope near the stream and in the far northwest corner on the steep north-facing slope above River Road. There's a small pocket of very large red oak, sugar maple and white ash in the rather large borrow-pit just inside the Gate WB25 at River Road.

Two prior timber sales have taken place in this working unit. One sale in 1979 took place on just a few acres in the farthest northwest corner of this area. This sale focused on cutting oak with the goal of establishing oak regeneration. Unfortunately, this is now where mountain laurel forms a very thick understory. The vast majority of this area, especially the steeply slope, kettle-hole riddled eastern portion, has received no prior treatment nor suffered significant natural disturbance. The result is a lack of advance regeneration with witch-hazel the primary understory plant. The red oaks in this area are large, single-stemmed and of good quality especially on the lower slopes. The white pines in this section are also of good quality with many reaching 110 feet in height. There's also the scattered beech colony.

The red oak in the northern section of this area, are generally smaller in diameter and are multi-stemmed. Given the long-time presence of an MDC labor yard right across River Road at Shaft 1, it is likely that firewood harvesting occurred in this area throughout the past. The small openings in the overstory in this area are occupied by saplings of black birch and red maple along with eastern hophornbeam and striped maple.

#### **Site Selection:**

The ideal watershed protection forest is one which best serves the function of the land as a producer of high quality drinking water in both short- and long-term. This forest must be vigorous and diverse in tree species and ages, be actively accumulating biomass and actively regenerating. Such a forest will be ideally suited to be resilient to and quickly recover from small- and large-scale disturbances such as diseases, insect infestations, ice storms and hurricanes.

This area was selected for management because of the lack of age diversity both in these 29 acres as well as the 2,112 acres that the DCR owns that flows into the Quinapoxet River.

#### Silvicultural Objectives:

The primary objective of this operation will be to begin the establishment of a young forest beneath this otherwise even-aged forest. Both white pine and red oak do very well on this site and so a mix of oak and pine regeneration will be the goal. Stocking will be reduced to variable levels throughout the area with the greatest decreases needing to occur in the red oak dominated stands in order to get red oak established rather than merely encouraging the further dominance of the witch-hazel understory.

#### **Cultural Resources:**

There are no known significant historic or archaeological recourses in this sale area. The area around the Myron W. Houghton house, barn and well, on the top of the slope inside Gate WB25 will be flagged in order to prevent damage from logging equipment.

#### Wildlife/Rare or Endangered Species:

A small portion of this area intersects with NHESP Priority Habitat polygon for known wood turtle habitat along the Quinapoxet River. NHESP review of this timber sale has determined that no negative impact to wood turtle habitat or directly to wood turtles themselves will occur.

#### **FIGURES**

- Figure 1. Forest Cutting Plan
- Figure 2. Map of harvest area showing approximate boundary, proposed openings and other features
- Figure 3. General locus map showing the location of the proposed timber harvest
- Figure 4. Pre-Harvest Photographs, A-B

Type of Preparer

LF Mass. Lic. For. TH Lic. Tim. Har

Landowner

Timber Buyer

BR Bridge

PO Pord PO Poled

OT Other

Stabilization

SE Seed MU Mulch

Stone

HB Hay Hales

CO ST Corchargy Mitigation

OT Other

Frazen

ST Stony MU Mad

Stony

Gravel

Applicant must provide DCR with all relevant information

pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.

before plan may be approved and ceiting may begin. Some forestry activities, such as prescribed burning and

#### For DCR Use Only: Forest Cutting Plan <u>32/-9692-</u>/Case No. File Number 3/3/17 Nat. Hert. and Notice of Intent under M.G.L. Date Rec'd 3/12//7 Earliest Start Nat. Hert. Imp. Chapter 132 - The Forest Cutting MPSALIE Pub. Dr. Wat. VS-WKISSETT River Basin Practices Act, 304 CMR 11.00 HO Gen. Obj. MAR 0 3 2017 (Effective Date: 1/1/04) Location Landowner West Boylston Lot 5266 Name DCR/DWSP/OWM Wachusett/Sudbury Town Road River Road Mailing Address 180 Beaman St. Acres 29 Proposed Start Date 4/17 Vol. MBF 62.1 Vol. Cds. 149 Vol. Tons 39 Town, State, Zip West Boylston, MA 01583 608-792-7806 Ch61 Ch61A Stew \*Case# Plan Preparer Est. Stumpage Value Gregory S. Buzzell Licensed Timber Harvester\*\* Address 180 Beaman Rd. To be supplied when known. Name Town, State, Zip West Boyslton, MA, 01583 Address 508-792-7806 Ext 317 Town, State, Zip \_\_\_\_ Type of Preparer Mass, Licensed Forester Mass. Lic. Harvester # \*Mass. Forester License # 25 \*\* This information may be supplied after the plan is approved, but before \*Required for land under Ch61, Ch61A or Forest Stewardship Harvesting in Wetlands Stream Crossings Indicate location on map SC-1 SC-2 îndicate location on map HW-1 HW-2 Forest Type (see pg 2) Type of Crossing Acres to be Harvested **Existing Structure** Resid, Basal Arca Type of Bottom (>50%?) Bank Height (ft) Stabilization Managemen Service Forester Comments Wetland Crossings ABL SELD REDUST/TRAILS ARE EXISTING WC-1 WC-2 WC-4 Indicate location on map WC-3 COPPUT CA) LETTEL VERMA CALARTA SE ESTELLA Length of Crossing \*PLAN PENIEUSED UNDERL PROTISK SNOW CANDIFONT Mitigation Stabilization Filter Strips Indicate location on map FS-1 FS-2 FS-4 Width (50', 160', or VA) VΑ #AMERICANT -> LANDING ROSED Type of Crossing CU Column Type of Bottom LE Ledge

#### Products to be Harvested\*

Species	Mbf/Cds		Mb@Cds
White Pine	28.0	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	27.0
Hemlock		Black Oak	5.7
Spruce		White Oak	1.3
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	61.I
Beech		Cordwood (Cds)	149
White Birch	  an-100-10-10-10-10-10-10-10-10-10-10-10-10	SW Pulp (Tons)	39
B&Y Birch		HW Paip (Tens)	1
Black Cherry		Chips (Tons)	

\*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.

#### **Cutting Standards**

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Imilicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	OR	wo		
Acres	18	11		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SH	SH		
Source of Regeneration	XI/8	11:8-		

#### 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.

X 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 fixed values and volumes to the Director or his/her agent if the final figures differ from those reported.

	rul	2/2/17
aature [6	f landowner(s)	Date '

Determi	nation and	Status		Final Repo	rt and Commen	its
Cutting Plan	Approved E	• • • • • • • • • • • • • • • • • • • •	xpires 3-2019		hat the aftere described For latities have been substant	
Signature of S	Crvice Forestel/Di	rector's Agent	<u>L(-3-17</u> Date	Signature of Serv	ice Forester/Director's Ag	ent Date
Extension	ıO	Expires/	Ser. For. Ints.	THE TAXABLE THE TAXABLE TAXABL		***************************************
Amendment	App 1 Dis 1	App 2 Dis 2	4-4-15 MOS T			
Forest Types	enemielekszykkék komponius azyon a		Designation of Trees	Type of Cut	an market and a second and the secon	Source of Regeseration
WF White Pine WK WF/How WN WF/Howd WO WF/Cod RP Red Pine SR Red Spruce	HK Hemkock HH Hem/Hdv BC Block Che BB Bese/Bio? OH Ouk/Hdv OR N Red O	wd RM Rod Mapte ary BE Booch Map SF Syruce/Fir vd SM Sugar Mapte	CT Cut Tree: LT Leave Tree SB Stand Beaudary OT Other	SH Shelterwood ST Seed Tree CC Clear Cot SE Selection SA Salvage SN Sanitation	Intermediate Harvests: CT Commercial Thin NT Non-Com Thin Non-Standard Systems:* HG Highgrade* DE. Dismeter Limit* OT Ober*	AD Advanced SE Natural Seed PI. Plant CO Coppice DS Direct Seed OT Other

## Forest Cutting Plan

Narrative Page

Use only if further explanation is required of information on pages one or two or if "other" was used in any category.

 Landowner:
 XR DUST OWN

 Town:
 1 100 FRANKE

 File Number:
 321 - 8682 - 17

There are no stream or wetland crossings in this lot. The main objective of this operation is to begin the establishment of a new cohort in this even-aged forest by encouraging the establishment of an understory of seedlings. In the long run, this will allow us to diversify the age structure of the forest by one day removing portions of the overstory. The haul trail has not been flagged. As this lot will be open to both skidders and forwarders, adjustments to the road may occur after the bid is awarded.



## DIVISION OF FISHERIES & WILDLIFE

1. Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 | fr (508) 389-7890 MASS.GOV/MASSWILDLIFE

Jack Buckley, Director

Michael Downey - Department of Conservation and Recreation 355 West Boylston Street Clinton, MA 01510

Cutting Plan No.	321-8692-17
NHESP Tracking No.	17-36616
Town	West Boylston
Road	Off River Road
Landowner	DWSP
Preparer	Gregory Buzzeli
Date	April 3, 2017

Dear Michael,

The Natural Heritage and Endangered Species Program ("the NHESP") of the Massachusetts Division of Fisheries and Wildlife ("the Division") has reviewed the above-referenced Forest Cutting Plan ("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 or brent.powers@state.ma.us.

Sincerely,

Cc:

Thomas W. French, Ph.D.

Assistant Director

West Boylston Conservation Commission

MASSWILDLIFE

Figure 2. Map of harvest area showing approximate boundary, proposed openings and other features

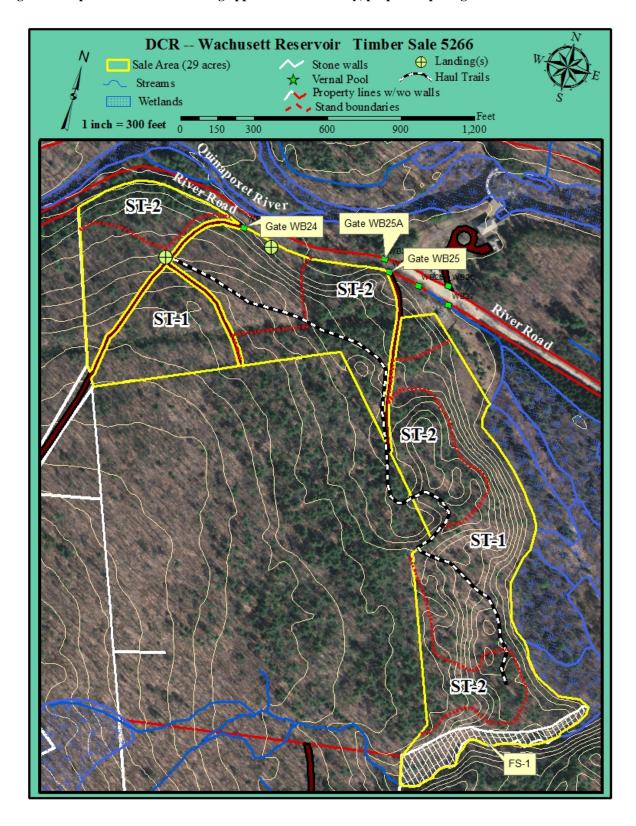


Figure 3. General locus map showing the location of the proposed timber harvest

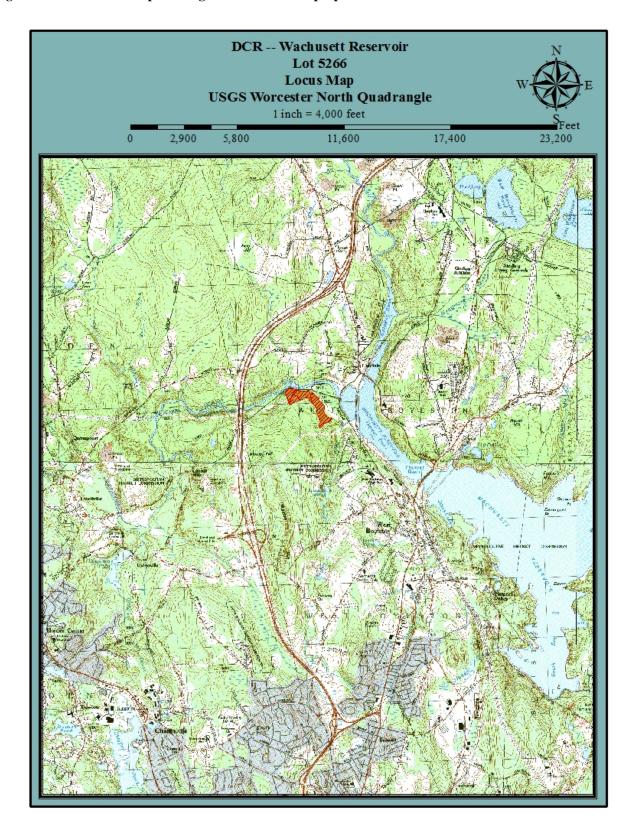


Figure 4. Pre-Harvest Photographs, A-B



A. The landing on River Road. Gate WB24 can be seen to the right.



B. Removing a portion of the overstory and damaging this mountain laurel and witchhazel understory should allow oak and pine regeneration to become established.