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

### Project Title: Lot 5297

DWSP Harvest Permit Number: 5297 DWSP Proposal ID: WA-21-331 DCR Forest Cutting Plan File Number: 321-32443-22

### **Site Information**

Watershed: Wachusett Town(s): West Boylston Acres: 67 Nearest Road: Hartwell Street Natural Heritage Atlas overlap?: Yes Public Drinking Water Supply Watershed?: Yes Forest Types: Mixed oak, Mixed pine ACEC?: No Soils: Paxton fine sand loam, Chatfield-Hollis-Rock Wetland Resources: Small unmapped wetland Vernal Pools: No

### **Harvest Information**

Harvest Start Date: 08/24/2021 Harvest End Date: 12/15/2023 Number of Wetland Crossings: None Number of Stream Crossings: None

## **Best Management Practices Applied**

Stream Crossings: None needed. Filter Strips: None needed. Wetland Crossings: None needed. Harvesting in Wetlands: None needed.

## **DWSP** Forester supervising this harvest

Name: Greg Buzzell Forester License #: 025 Phone #: 774-261-1841 Email: greg.buzzell@mass.gov

# **NARRATIVES**

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

This working unit was acquired in 2014 from CLT Park LLC. About 80% of this working unit was defined as pasture around 1900, with the remaining southern portion a woodland area. In the 1938 hurricane assessment map some scattered damage was found adjacent to this unit. The site is characterized by its variety of forest types, topography and number of easements that run through or along it. The northwestern portion of the working unit is along and beside a ridge and dominated by white pine and pitch pine with pine/hardwood understory. The southern portion of the working unit is mostly flat on the east side with a westerly facing slope on the west side and has a pretty uniform mixed oak stand with a good amount of white pine regeneration along with pockets of witch-hazel and mountain laurel. Spongy moth was noted in the mixed oak stand. The northeasterly area has a heavier red maple regeneration component with both white pine and red maple in the overstory. Running in a north/south direction through the working unit is a young stand of white pine and hardwoods where an existing powerline easement is. Also found in this working unit was black cherry, red oak, black oak, white oak, American beech, sassafras, paper birch, white ash, gray birch and black birch. The working unit is in the Asian longhorned beetle regulated area with several hundred acres of full host removal being completed within the past ten years all around this working unit.

## 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.

## Silvicultural Objectives:

The goal will be to establish a new age class on 9.1 acres of this working unit by the removal of the overstory in patches. These openings which range from 0.3 to 2.0 acres in size are distributed throughout the area, taking advantage of the advance regeneration. Thinning will occur on 5.3 acres, either to encourage the pitch pine in the northern end of the sale area or to further enhance the potential habitat for the eastern whip-poor-will, a species of Special Concern in Massachusetts.

## **Cultural Resources:**

This area has been assessed by the DCR Archeologist for both known sites of cultural and archeological importance as well as for potential use by pre-Contact Native Americans.

## Wildlife/Rare or Endangered Species:

None known.

## **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-C

Figure 5. Post-Harvest Photographs, A-D

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

#### . .....

Locat	ion					
Town	West Boylsto	on			Lot 5297	7
Road	Hartwell Stre	et				_
Acres	40	Prop	osed Star	t Date	9/01/21	
Vol. MI	BF <u>49</u> Vo	l. Cds1	86	Vol. Ton	s <u>22</u>	_
Plan I	Preparer					
Name	Russell Wi	lmot				
Address	180 Beama	an St.				
	State, Zip West			583		
Phone		792-7806				
	Preparer <u>Mass</u>					
	Forester License					
*Requir	ed for land unde	r Ch61, C	h61A or	Forest St	tewardsh	ip
Charles		-				
Strea	m Crossing	5				
ndicate lo	cation on map	SC-1	SC-2	SC-3	SC-4	7
Type of C	Crossing					1
Existing	Structure					1
Type of H	Bottom					1
Bank Hei	ght (ft)					1
Stabilizat	ion					
Wetla	nd Crossing	as				
Indicate lo	cation on map	WC-1	WC-2	WC-3	WC-4	
Length of	f Crossing					
Mitigatio	n					
Stabilizat	ion					
Filter	Strips					
				-	-	7
	cation on map	FS-1	FS-2	FS-3	FS-4	-
Width (50	0', 100', or VA)					
ype of Prep			abilization	Mitiga	tion	Type o
F Mass.	Lic. For. CU Culv m. Har BR Brid	vert SE		FR I	Frozen Dry	LE L ST S
B Timbe	r Buyer FO Ford	ĩ co	O Corduro			MU N
O Lando T Other	wner PO Pole OT Othe	er HI	3 Hay Bal	es		GR ( OT (
		O	f Other			

#### For DCR Use Only: File Number Case No. Date Rec'd Nat. Hert. Nat. Hert. Imp. Earliest Start **River Basin** Pub. Dr. Wat. Gen. Obj. ACEC

#### 1.5 n d a er

Name DCR/DWSP/OWM Wachusett/Sudbury
Mailing Address 180 Beaman St.
Town, State, Zip West Boylston, MA 01583
Phone <u>608-792-7806</u>
Ch61 Ch61A Stew *Case #
Est. Stumpage Value
icensed Timber Harvester**
Name Will be provided when known
Address
Town, State, Zip
Phone

arvester #

tion may be supplied after the plan is approved, but before

### ting 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%?)				

#### e Forester Comments

: icant must provide DCR with all relevant information re plan may be approved and cutting may begin. e forestry activities, such as prescribed burning and cide or fertilizer application may require additional permits. ault MA Forestry BMP Manual for further information.

pg 3 of 5

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

#### Species Mbf/Cds Mbf/Cds White Pine 12 Red Maple Products Red Pine Sugar Maple Pitch Pine Red Oak 22.7 Black Oak 11.9 Hemlock Spruce White Oak 2.3 Forest Other Sftwd. Other Hdwd. White Ash **Total Mbf** 49 Beech Cordwood (Cds) 186 White Birch SW Pulp (Tons) 22 B & Y Birch HW Pulp (Tons) Black Cherry Chips (Tons)

Products to be Harvested\*

\*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				
Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	МО	WO	WH	
Acres	20	14	6	
Landowner Objective	LT	LT	LT	
Designation of Trees	СТ	CT	NA	
Type of Cut	SH/CT	CT/SH	NA	
Source of Regeneration	AD	AD	NA	

#### Landowner Signature

andowne

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.

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 Harves
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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.

Determi	nation and Status	_	Final Report and Comments
Cutting Plan	Approved Disapproved E	Expires	I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.
Signature of S	ervice Forester/Director's Agent	Date	Signature of Service Forester/Director's Agent
Extension	1 2 <u>/</u>	s Ser. For. Ints.	
	App 1 Dis 1 App 2 Dis 2	/	
Amendment			

## Forest Cutting Plan Narrative Page

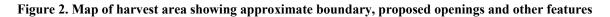
Landowner:\_\_\_\_\_

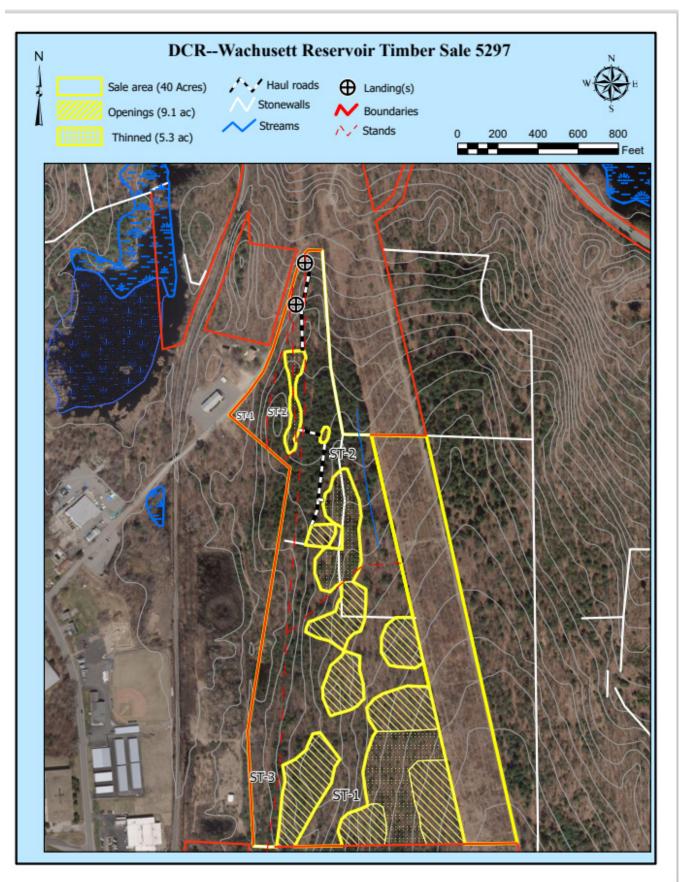
Town:

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

File	Number:	

There is a faint hard to distinguish stream channel on the easterly side of this sale area next to the power lines. It appears that this channel only flows following heavy rain events in wet seasons. It does not appear to be connected to wetlands, although there are some large red maples in the area. Downstream on private 9 Р land just north of DWSP property the stream has been dug out in the past and is better defined. There is no M cutting planned near this stream and it will not be crossed. 2 Two landings have been flagged. The westerly landing provides better access for equipment and trucks but is small. The less accessible easterly landing will provide the needed extra space for logs. In order to release advance regeneration, 8 openings in the overstory are being created, covering 9.07 acres. These openings range from 0.29 to 1.96 acres in size with an average of 1.1 acres. They are spread out throughout the sale area focusing on where the advance regeneration is well established. Silviculture There is some thinning occurring on a combined 5.3 acres in four different areas of this sale. The northerly thinned areas will look to open around some pitch pines that are in danger of being overcome with the stronger growing white pine and oak around. The thinned area to the south is creating habitat in addition to the openings more suitable for the eastern whip-poor-will which is a species of Special Concern in Massachusetts and for which there are historical records in this area. The main objective of this operation is to diversify the age structure of the forest by removing the overstory in patches thereby releasing the advance regeneration. The current age structure is limited with an Objectives insufficient component of young forest. The secondary objectives are to create some advanced regeneration in the future and to help promote and protect the slowly dying pitch pine areas and to create habitat more suitable for the eastern whip-poor-will. This lot is within the Asian longhorned beetle regulated area therefore the Permittee must be under a Compliance Agreement with the ALB Eradication Program during the operation of this Permit. The 26 cords of ALB host material in this lot must be handled in a manner consistent with the Compliance Other Agreement. ST-3 is a young stand and no cutting will occur.





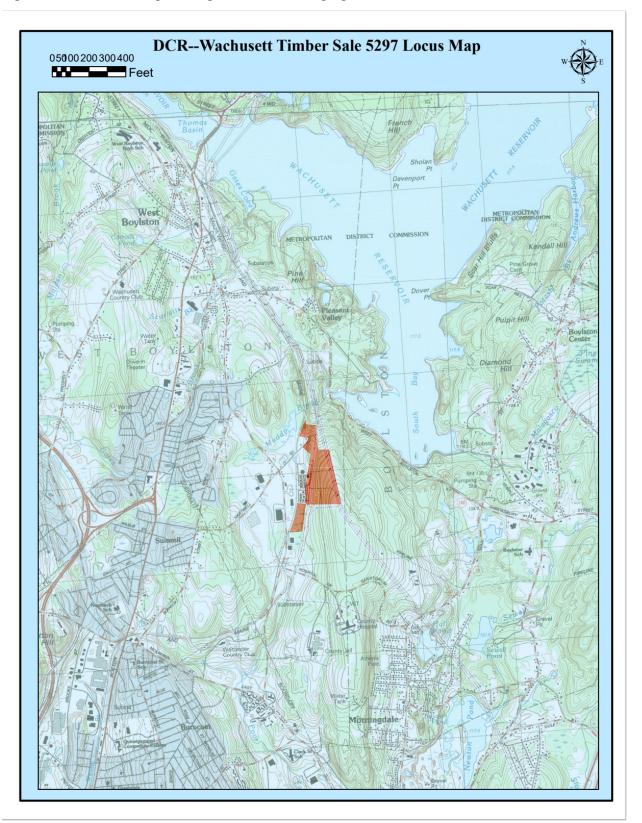


Figure 3. General locus map showing the location of the proposed timber harvest

Figure 4. Pre-Harvest Photographs, A-C

A. Landing



B. Opening with diverse regeneration



C. Thinning to promote pitch pine.



Figure 5. Post-Harvest Photographs, A-D



**A.** The north end of a 2-acre opening. White pine of a diversity of sizes was released with the removal of the primarily oak overstory.



**B**. An excellent acorn crop in 2022 has resulted in significant germination especially where logging machinery has driven.



**C.** Tree tops and small stems were used to prevent rutting.



**D.** White pines were removed from this area leaving only pitch pine.