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

Project Title: Lot 5299

DWSP Harvest Permit Number: 5299 DWSP Proposal ID: WA-20-240 DCR Forest Cutting Plan File Number: 282-33903-22

Site Information

Watershed: Wachusett Town(s): Sterling Acres: 67.5 Nearest Road: Beaman Rd. Natural Heritage Atlas overlap?: Yes Public Drinking Water Supply Watershed?: Yes Forest Types: white pine/oak, Mixed hardwoods ACEC?: No Soils: Hinckley Loamy Sand and Paxton fine sandy loam Wetland Resources: Wilder Brook, Wetlands and intermittent streams Vernal Pools: Two potential vernal pools and one verified

Harvest Information

Harvest Start Date: 06/01/2022 Harvest End Date: 06/01/2024 Number of Wetland Crossings: None Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings: None Filter Strips: One variable width filter strip. Wetland Crossings: None Harvesting in Wetlands: None

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:

The primary species in the forest overstory in this area is white pine along with red oak, red maple and black birch. There is also black oak, white oak, black cherry, elm, white ash and hemlock. Much of the hemlock is found in the kettles in the peninsula of upland in the west side of the area and while it's probably not free of hemlock wooly adelgid, it appears pretty healthy at this point in time. The understory is comprised of excellent advance regeneration along with witch hazel, lowbush blueberry, maple-leaved viburnum and shadbush. There is highbush blueberry and winterberry in the damper pockets in the topography. No forest management or other cutting has occurred in these stands that originated in 1920 and 1938 following abandonment of these pastures. Where a gravel removal operation took place in the south end of the area, there are now white pine dominated stands that date from the 1960s through the early 1990s.

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:

With adequate advance regeneration present throughout this working unit, 7 openings will be created that range from 0.58 to 1.77 acres in size hereby achieving the goal of creating a new age class in this area. These are well distributed throughout the proposed area taking advantage of where the advance regeneration is best. Partial cutting will occur between the openings on 2.7 acres focusing on the removal of trees of the poorest quality while maintaining species diversity.

Cultural Resources:

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

Wildlife/Rare or Endangered Species:

None

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-D

Figure 5. Post-Harvest Photographs, A-B

Forest Cutting Plan

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

Location

Town Sterling		1	Lot 5299	
Road Beaman Roa	ıd			
Acres <u>68</u>		osed Star		
Vol. MBF 200.9 Vo	ol. Cds. <u>1</u>	12	Vol. Ton	s <u>13</u>
Plan Preparer				
Name Russell W	ilmot			
Address 180 Beam	an St.			
Town, State, Zip West	t Boyslton	, MA, 01	583	
· · · · _	792-7806			
Type of Preparer Mass			r	
*Mass. Forester License				
*Required for land under	er Ch61, C	h61A or	Forest St	ewardsh
1				
Stream Crossing				
Indicate location on map	SC-1	SC-2	SC-3	SC-4
		SC-2	SC-3	SC-4
Type of Crossing		SC-2	SC-3	SC-4
Type of Crossing Existing Structure		SC-2	SC-3	SC-4
Type of Crossing Existing Structure Type of Bottom		SC-2	SC-3	SC-4
Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization		SC-2	SC-3	SC-4
Type of Crossing Existing Structure Type of Bottom Bank Height (ft)	SC-1	SC-2	SC-3	SC-4
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossin	SC-1	SC-2	SC-3	SC-4
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossin Indicate location on map	SC-1			
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossing Indicate location on map Length of Crossing	SC-1			
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization	SC-1			
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossing Indicate location on map Length of Crossing Mitigation	SC-1			
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossin Indicate location on map Length of Crossing Mitigation Stabilization	SC-1			

For DCR Use Only:

File Number	 Case No.	
Date Rec'd	 Nat. Hert.	/
Earliest Start	 Nat. Hert. Imp.	
River Basin	 Pub. Dr. Wat.	
Gen. Obj.	 ACEC	

Landowner

Name DCR/DWSP/OWM Wachusett/Sudbury Mailing Address 180 Beaman St.

Town, State, Zip West Boylston, MA 01583
Phone608-792-7806
Ch61 Ch61A Stew *Case #
Est. Stumpage Value

Licensed Timber Harvester**

Name	Will be provided when known
Address	
Town, S	tate, Zip
Phone _	
Mass. L	c. Harvester #
**This in work begin	formation may be supplied after the plan is approved, but before ns.

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

odes	LF	e of Preparer Mass. Lic. For. Lic. Tim. Har Timber Buyer Landowner		e of Crossing Culvert Bridge Ford Poled	SE MU	<u>llization</u> Seed Mulch Corduroy Stone	<u>gation</u> Frozen Dry Other	LE ST MU	e of Bottom Ledge Stony Mud Gravel	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.	
Ŭ	OT	Other	OT	Other	HB OT	Hay Bales Other		OT	Other	Consult MA Forestry BMP Manual for further information.	
					attached narrative page pg 3 of 5						

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	164.8	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	29.9
Hemlock		Black Oak	4.9
Spruce		White Oak	1.2
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	200.9
Beech		Cordwood (Cds)	112
White Birch		SW Pulp (Tons)	13
B & Y Birch		HW Pulp (Tons)	
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

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WO	RM		
Acres	54	14		
Landowner Objective	LT	LT		
Designation of Trees	CT	N/A		
Type of Cut	SH	N/A		
Source of Regeneration	AD/SE	N/A		

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.

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.

Signature of	f landowner(s)	Date
Determi	ination and Status	Final Report and Comments
Cutting Plan	Approved Disapproved Expires	I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.
Cutting Plan Cutting Plan Signature of : Extension	Service Forester/Director's Agent Date	Signature of Service Forester/Director's Agent Date
Extension	Expires Ser. For. Ints 1 2 / /	
Amendment	App 1 Dis 1 App 2 Dis 2	
Forest Types WP White Pin WK WP/Hem WH WP/Hdw WO WP/Oak RP Red Pine SR Red Spruce	HH Hem/Hdwd RM Red Maple LT Leave Tree BC Blck Cherry BE Beech SB Stand Boundau BB Bee/Bir/Map SF Spruce/Fir OT Other OH Oak/Hdwd SM Sugar Maple Landowner Objectiv	SH Shelterwood Intermediate Harvests: AD Advanced ST Seed Tree CT Commercial Thin SE Natural Seed ry CC Clear Cut NT Non Com Thin PL Plant SE Selection Non-Standard Systems:* CO Coppice re SA Salvage HG Highrade* DS Direct Seed gt. SN Sanitation DL Diameter Limit* OT Other
4	*If Other (OT) or a non-standard system is used an expla	

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:	
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Town:	

File Number:_____

	No Stream or wetland crossings. One Variable width Filter Strip in the far southern portion of the lot.
Ø	Haul roads are preexisting.
BMPs	Landing is along a field about 1400 feet North of the sale area.
Silviculture	In order to release advance regeneration, 7 openings in the overstory are being created, covering 7.7 acres. These openings range from 0.58 acre to 1.77 acres in size with an average of 1.1 acres. They are well distributed throughout the area taking advantage of the advance regeneration comprised of white pine, oaks and other hardwoods. Thinning will occur in two areas in between the openings covering about 2.7 acres. The thinned areas have less regeneration, oak tree canopies thinned out from dispar moth/competition or poor form/vigor.
Objectives	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 insufficient component of young forest. A secondary objective is to create some ground disturbance and sunlight in thinned out areas where regeneration can then take hold and remaining trees can fill in with more space.
Other	Depending on the logger, some wood from this site might need to be trucked to a different landing area off site more suitable for large log trucks. The entrance to the site is thru a shared driveway with an abutter.



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-D

A. Opening with thick regeneration.



B. White pine marked for removal in an opening with hardwood and white pine regeneration.



C. White pine marked in an opening with white pine retention and hardwood regeneration.



D. White pine marked and some unmarked in a thinned area.



Figure 5. Post-Harvest Photographs, A-B

A. Looking southwest along the edge of one of the smaller areas of overstory removal.



B.

