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: Lot 5287	
DCR Forest Cutting Plan File Number: 241-24743-20	

Site Information

Watershed: Wachusett	Town(s): Princeton		
Acres: 16	Nearest Road: Bullard Road		
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes		
Forest Types: White pine.oak; White pine	ACEC?: No		
Soils: Hinckley sandy loam			
Wetland Resources: Babcock Brook borders the sale are to the south and Snow Pond to the north			
Vernal Pools: None			

Harvest Information

DWSP Permit Start Date: 3/25/20	DWSP Permit End Date: 6/30/22
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Transport of the control of the cont			
Stream Crossings	There are no stream crossings.		
Filter Strips	No harvesting will occur in the filter strip.		
Wetland Crossings	tland Crossings There are no stream crossings.		
Harvesting in Wetlands There is no harvesting in wetlands.			

DWSP Forester supervising this harvest	
Name: Greg Buzzell	
Forester License #: 025	
Phone #: 774-261-1841	

NARRATIVES

General Description/Forest Composition/History:

This forest is identified by its flat topography that slopes down on all sides gradually. It is a well-drained site with a potentially high water table as evidenced by the highbush blueberry. The dominant species is white pine and red oak followed by black birch, black cherry, black oak, sugar maple, red maple, striped maple, American beech, and paper birch. The sugar maples are on the southwestern slopes and not on the flat hilltop. The white pine is of the best vigor on the site and the oak is of decent quality, although smaller oaks are now dying back. Fortunately, white pine is regenerating well and is for the most part spread out throughout the lot. There is some mixing of oak regeneration on the site as well as areas with chestnut sprouts and hemlock regeneration. Mountain laurel is present in small veins and patches throughout the site and becomes thick on the northern slopes where the hemlock is thinning out leading down to Snow Pond.

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 good advance regeneration on much of this area, openings will be made to release advance regeneration. The focus of management is on the flat hilltop and the gently sloped areas adjacent to it. Three openings totaling 2.7 acres have been marked with one of the openings being 2.0 acres in size. These openings specifically targeted areas with good regeneration present. Good white pine regeneration has been especially targeted as pine is better suited to this site, although a mix of hardwoods including oak will be released as well. A thinning of the white pines will occur on a 1.7 acre area adjacent to the openings.

Cultural Resources:

There are no known historic and archaeological resources associated with this site. If any features are uncovered before or during the harvest, they will be protected according to guidelines set forth in the Comprehensive Land Management Plan.

Wildlife/Rare or Endangered Species:

There are no critical habitats or known rare or endangered plants or wildlife.

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

Forest Cutting Plan

and Notice of Intent under M.G.L. Chapter 132 - The Forest Cutting Practices Act, 304 CMR 11.00
Practices Act, 304 CMR 11.00
FEB 2 7 2020

For DCR U	se Only:		
Date Rec'd	2 2 1 20	Nat. Hert.	NO /
Earliest Start River Basin Gen. Obj.	ANASHUA LT	Nat. Hert. Imp. Pub. Dr. Wat. ACEC	

Town Princeton			Lot	5287	Name DCR/DWSP/	OWM W	achusett/S	Sudbury	
Road Bullard Road			-		Mailing Address 180 Be				
Acres 16		ed Start	Date 4/	20	Maning Hames 100 20				
Vol. MBF 39.9 Vol.					Town, State, Zip West I	Boylston.	MA 0158	3	
Vol. MBr 39.9 Vol.	. Cus. <u>01</u>		OI. TOIIS	50		22-7806			
					Ch61 Ch61A		7 *Cas	e#	
Plan Preparer					Est. Stumpage Value _				
	n 11								
Name Gregory S.					Licensed Timber	Harve	ster**		
Address 180 Beaman	n Rd.								
		015	02		Name To be supp				
Town, State, Zip West				_	Address Town, State, Zip				
	61-1841				Phone				
Type of PreparerMass.					Mass. Lic. Harvester #				
*Mass. Forester License					**This information may be so				
*Required for land under	Ch61, Ch	161A or 1	orest Ste	wardship	work begins.				
Stream Crossing	S				Harvesting in V	Vetlan	ds		
To the second second	SC-1	SC-2	SC-3	SC-4	Indicate location on map	HW-1	HW-2	HW-3	HW
Indicate location on map	SC-1	30-2	30-3	50-4	Forest Type (see pg 2)				
Type of Crossing	-				Acres to be Harvested				
Existing Structure	-				Resid. Basal Area				
Type of Bottom	1				(>50%?)				
Bank Height (ft)			-						
Stabilization					20.00				
Wetland Crossing	gs				Service Fores	ter Co	mmen	ts	-
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					
	VA	VA							
Width (50', 100', or VA)									

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	37.3	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	2.6
Hemlock		Black Oak	
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	39.9
Beech		Cordwood (Cds)	61
White Birch		SW Pulp (Tons)	58
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	WP		
Acres	12.5	3.5		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SH	SH		
Source of Regeneration	AD	AD		

Landowner	Signature

andowner

Service Forester

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.

Freatment

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 specie

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) hereby 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 oKlandowner(s)	2 37 2030 Date
Determination and Status 341-24743-20	Final Report and Comments
Approved Disapproved Expires Cutting Plan	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 Expires Expires Ser. For. Ints	
App 1 Dis 1 App 2 Dis 2 Amendment	
Forest Types	SH Shelterwood Intermediate Harvests: AD Advanced

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: <u>NOR-DWSP</u>
Town: <u>Princeton</u>

File Number: <u>241-24743-20</u>

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Silviculture

Objectives

There will be no cutting taking place within FS-1 and FS-2.

In order to release advance regeneration, 3 openings in the overstory are being created, covering 2.7 acres. These openings range from 0.25 to 2.1 acres in size with an average of 0.9 acres. They are placed up on the plateau within the sale area focusing on where the advance regeneration is well established. The only partial cutting between the patches is the 1.7 acre area as shown on the map.

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 help establish regeneration where it is lacking by conducting a thinning.

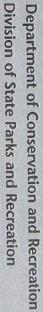
The landing on Bullard Road and access into the woodlot will be very tight and need careful attention prior to the initial layout.

Other

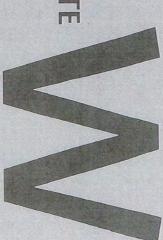
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COMMONWEALTH OF MASSACHUSETTS

FILE # 211-24743-20



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 DCC DWSP OWN
(Name of Owner) (Address)

in accordance with the

provision of M.G.L. Chapter 132, Section 40-46, filed in ___ and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the ころろろ with the Dept. of Conservation

DCR Phone No. 978-368-612

Director's Agent NICHAEC DOWN

Approval Date 3-9-2020

ISSUED BY:

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

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

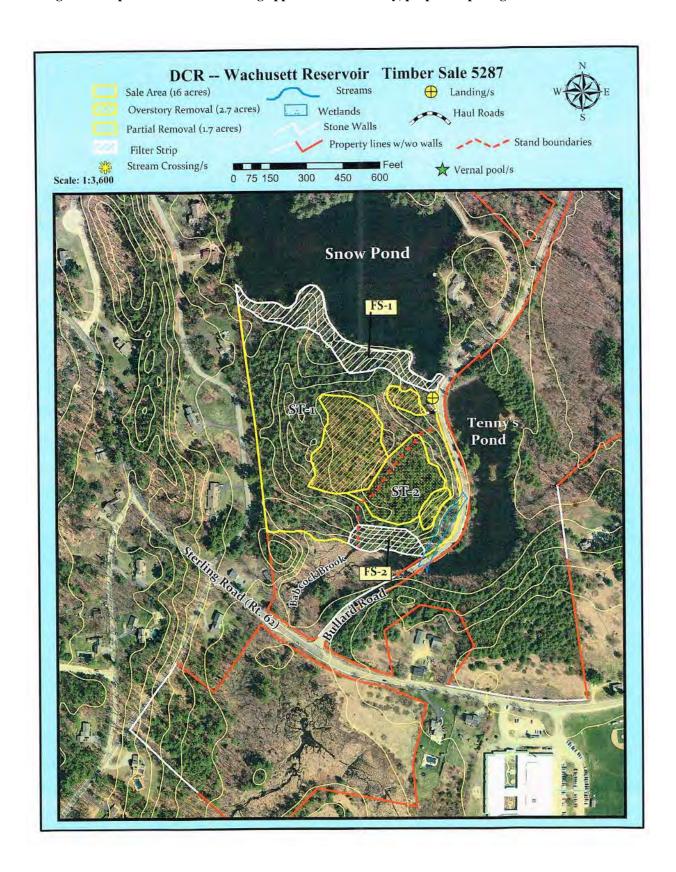


Figure 3. General locus map showing the location of the proposed timber harvest

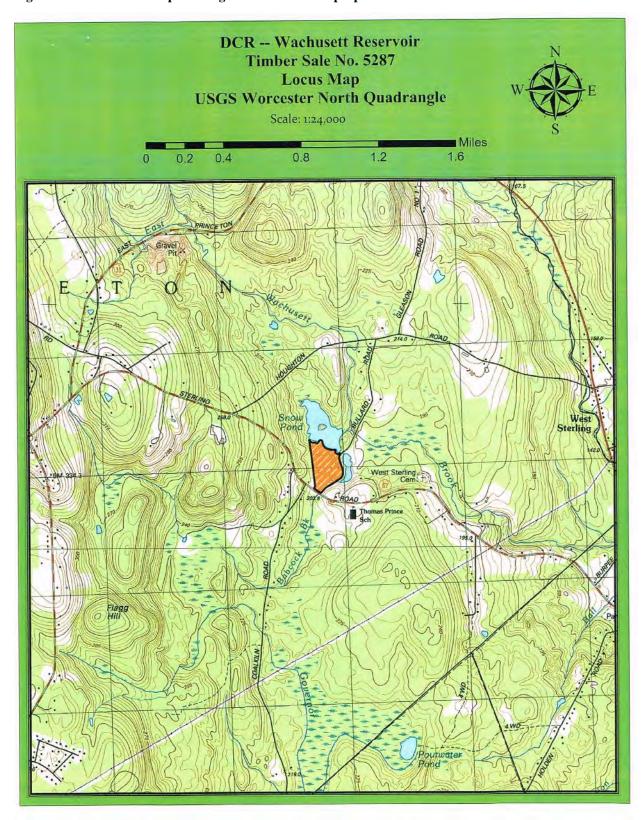


Figure 4. Pre-Harvest Photographs, A-D



A. Landing location on Bullard Road in Princeton.



B. The overstory here is being removed to release the young white pine and hardwoods and give them the light and space they need to continue to thrive.



C. This group of white pine trees is being retained within the opening to provide structural diversity.



D. This area is being thinned to provide the remaining overstory trees more space.