# 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: 5292	
DCR Forest Cutting Plan File Number: 134-32172-21	

### **Site Information**

Watershed: Wachusett	Town(s): West Boylston
Acres: 68	Nearest Road: Malden St.
Natural Heritage Atlas overlap?:Yes	Public Drinking Water Supply Watershed?: Yes
Forest Types: Mixed Oak	ACEC?: No
Soils: Chatfield-Hollis-Rock Outcrop Complex	
Wetland Resources: Yes	
Vernal Pools: Yes	

### **Harvest Information**

DWSP Permit Start Date: 06/23/2021	DWSP Permit End Date: 06/30/2023
Number of Wetland Crossings: None	Number of Stream Crossings: Three

**Best Management Practices Applied** 

Dest Management I race	
Stream Crossings	Yes
Filter Strips	Yes
Wetland Crossings	No
Harvesting in Wetlands	No

DWSP Forester supervising this harvest
Name: Russell Wilmot
Forester License #426
Phone #:860-304-0655

### **NARRATIVES**

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

The working unit was proposed, marked, sold and cut in 2010. At that time, there was no advance regeneration in the mixed oak stand while there was decent regeneration in the white pine-oak stand on the top of the hill. While the proposal in 2010 call for the creation of some overstory openings in the white pine-oak stand, in the end, the decision was made to not make any openings. The white pine-oak stand was treated essentially the same as the mixed oak stand. Overall stocking was decreased by roughly 30% while every white pine in the overstory was daylighted by removing all trees from their immediate vicinity. All of this was done to encourage the establishment of white pine regeneration on this very dry site. This operation was successful and today there is excellent advance regeneration of white pine throughout this area.

### **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 now present throughout this working unit as a result of the harvest in 2010, openings will be made on up to 20.6 acres thereby achieving the goal of creating a new age class on 1/3rd of this area. This will be accomplished by the removal of the overstory in patches that average about 1 acre with a maximum size of about 2 acres. These will be well distributed throughout the proposed area taking advantage of where the white pine regeneration is best.

Any partial cutting that may occur between the openings on up to 1/3rd of the area will be focused on benefiting white pine.

### **Cultural Resources:**

Each of the two small wetlands has a small concrete weir with a v-notch that in the past would have allowed more water to be held in the wetlands. This was done to provide water for steam engines used in the quarrying activities that took place in the granite outcrops on this hilltop. The weirs do not currently effect the water flow out of the wetlands.

### Wildlife/Rare or Endangered Species:

As a result of the proposal of this working unit in 2010, the two vernal pools (#129 & 130) have been verified.

### **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

## Forest Cutting Plan and Notice of Intent under M.G.L.

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

For DCR L	Ise Only:		
File Number	134-32172-21	Case No.	
Date Rec'd	12-16-2020	Nat. Hert.	VES /
Earliest Start	1-4-2021	Nat. Hert. Imp.	VE-5
River Basin	NASHUA	Pub. Dr. Wat.	WACLLEETT
Gen. Obj.	LT	ACEC	МО

Location			OFFICE CONTRACTOR AND ADDRESS OF THE		Landowner				
Town West Boyls	ton/Holden			Lot 5292	Name <u>DCR/DWS</u> Mailing Address 180 l				
Road Malden Stre	et in West	Boylsto	n and Ho	lden	maning radiess 100 l	Deaman St	*		
Acres 68		osed Sta	rt Date_	12/20	Town, State, Zip West	Boylston.	MA 015	83	
Vol. MBF 10.4 V	ol. Cds. 23	39	Vol. Tor	s <u>0</u>		792-7806			
Plan Preparer					Ch61 Ch61A	] Stew [	□ *Ca	se#	
		Magazina Principles	NAME OF TAXABLE PARTY O		Est. Stumpage Value				
Name Russell W									-
Address 180 Beam	ian Rd.			-	Licensed Timbe	r Harve	ster*	(C	
					Name To be sup	plied when	n known		
Town, State, Zip Wes	t Boylston,	MA, 01	583	-	Address				
	304-0655			other transport	Town, State, Zip				
Type of Preparer Mas					Phone		-		
*Mass. Forester License					Mass. Lic. Harvester #				
*Required for land und	er Ch61, Cl	h61A or	Forest St	ewardship	**This information may be a work begins,	supplied after	the plan is	approved,	out bef
Stream Crossing	js				Harvesting in \	Vetlan	ds	Almost reputations	
Indicate location on map	SC-1	SC-2	SC-3	SC-4	Indicate location on map	HW-1	HW-2	HW-3	HW
Type of Crossing	PO	PO	PO		Forest Type (see pg 2)		1		AE-11
Existing Structure	NO	NO	NO		Acres to be Harvested				
Type of Bottom	· MU	MU	MU		Resid. Basal Area		1		
Bank Height (ft)	~1'	~1'	~1'		(>50%?)				
Stabilization	CO	CO	CO						
Wetland Crossin	gs		The state of the s		Service Fores	ter Con	nment	S	
Indicate location on map	WC-1	WC-2	WC-3	WC-4	* Skid READS/TA	cis Are	existi	ig .	eto.
Length of Crossing					* NO MOUSE AL	lowed in	y PLAN	IT PROTE	ctloy
Mitigation					ZONE prior to				
Stabilization					SEE NHESP LETTE	r for Di	TAICS		America
Filter Strips					KIF WORK IS -	o occur	LOUT		
Indicate location on map	FS-1	FS-2	FS-3	FS-4	PLANT PROJECTION	ZONE AND	on to c	Y => FI	H9
Width (50', 100', or VA)	VA	VA.	10-0	X-13-4	* CONTROL HOLDS	1 May	Regered	NIG CROSS	5/1/9
		- 4.8		and the second second	INFRASTRUCTURES	Drummen	s tooms	OA STU	uss
			Name of Street, sold of the Street, sold of th		londing of mocoe	451. HOL	den.		
VPC of Preparer         Type of C           F         Mass. Lic. For.         CU         Culv           F         Mass. Lic. For.         CU         Culv           Lic. Tim. Har         BR         Brid           B         Timber Buyer         FO         Ford           O         Landowner         PO         Pole           T         Other         OT         Othe	rert SE ge MU CO d ST		Mitigat FR Fr DR D OT O	rozen LE Le ry ST St	tony before plan may be fud Some forestry activi- ravel pesticide or fertilize	approved and ties, such as p r application r	cutting may rescribed be nav require	begin. uning and	monito

### Products to be Harvested\*

Mbf/Cds Species Mbf/Cds White Pine Red Maple Red Pine Sugar Maple Pitch Pine Red Oak 3.7 Hemlock Black Oak 6.7 Spruce White Oak Other Sftwd. Other Hdwd. White Ash Total Mhf 10.4 Beech Cordwood (Cds) 239 White Birch SW Pulp (Tons) 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**

Stand Treatment

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	OM			
Acres	68			
Landowner Objective	LT			
Designation of Trees	CT			
Type of Cut	SH			
Source of Regeneration	AD			

Landowner	Signature
-----------	-----------

Forest Products

andowner

Forest

Service

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 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 landowner(s)

Date

Determination			#134-32172-2
Approve	d I	Disapproved	Expires

Final Report and Comments

Thereby certify that the afore described Forest

Approved Disapproved Expires

12-16-2022

1-8-2021

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

Signature of Service Forester/Director's Agent

Expires

Extension 1 2 /

Ser. For. Ints.

S	Fore	st Types
0	WP	White P
	WK.	WP/Her
0	WH	WP/Hd

WO

SR

Hemlock OM Mixed Oak Hem/Hdwd Blck Cherry FIFE RM Red Maple BE WP/Hdwd Beech WP/Oak BB Bee/Bir/Map SF Spruce/Fir Sugar Maple Red Spruce OR N Red Oak Pitch Pine

Designation of Trees
CT Cut Tree
LT Leave Tree
SB Stand Boundary
OT Other
Landowner Objective

Type of Cut
SH Shelterwood
ST Seed Tree
CC Clear Cut
SE Selection
SA Salvage
SN Sanitation

Intermediate Harvests:
CT Commercial Thin
NT Non Com Thin
Non-Standard Systems:\*
HG Highgrade\*
DL Diameter Limit\*

Source of Regeneration
AD Advanced
SE Natural Seed
PL Plant
CO Coppiee
DS Direct Seed
OT Other

Date

ace OR NRod Oak PP Pitch Pine LT Long-term Mgt. SN Sanitation DL Diameter Limit\*
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

pg 4 of 5

### 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: DCHOWSP/OWM

Town:

tolden West Baylston

File Number: 134-32172-21

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

All stream crossings are at pre-existing locations. SC-2 in particular shows signs of past rutting on the uphill approach and so extra care will be taken to protect the approaches before hauling begins.

Two landings have been identified. The northern landing may be utilized for the openings on the top of the hill if the case arises where less soil/forwarder damage would occur by using it or if the equipment cannot make the climb from the southern landing.

In order to release advance regeneration, 16 openings in the overstory are being created, covering 17 acres.

These openings range from 0.18 to 2.3 acres in size with an average of 1.0 acres. They are spread out throughout the sale area focusing on where the white pine advance regeneration is well established, or mature white pine is an immediate seed source.

There is no partial cutting on this sale.

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.

The southern landing has a concrete ditch at the roadside edge that will have to be protected and planked for truck use/access.

All stream crossings must be bridged if streams are flowing.

ves Silviculture

BMPs

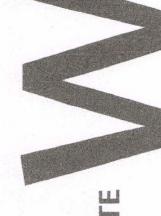
Objectives

Other

COMMONWEALTH OF MASSACHUSETTS

Department of Conservation and Recreation Division of State Parks and Recreation

FILE # 134-32172-21



# FOREST CUTTING PLAN CERTIFICATE

WESTON in accordance with the (Address) This certifies that DCR DJSP OWIM (Name of Owner)

Post this in a conspicuous place within the area in which the harvesting operation is to take place.

provision of M.G.L. Chapter 132, Section 40-46, filed in CCINTOL

with the Dept. of Conservation and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the

MACCEL

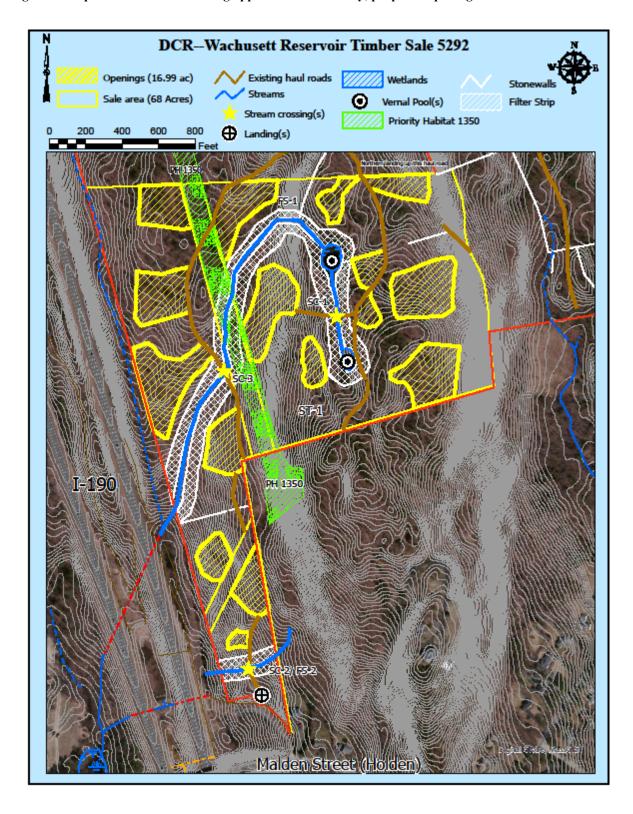
LOT 5292 1-8-2024

Director's Agent MICHINEC DOWNE DCR Phone No. 978 - 368-0126

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.



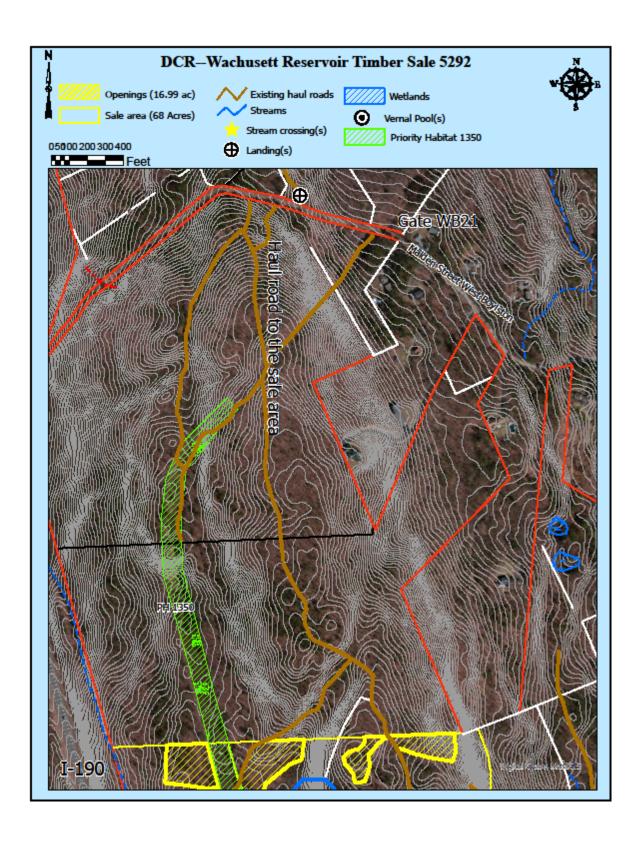


Figure 3. General locus map showing the location of the proposed timber harvest

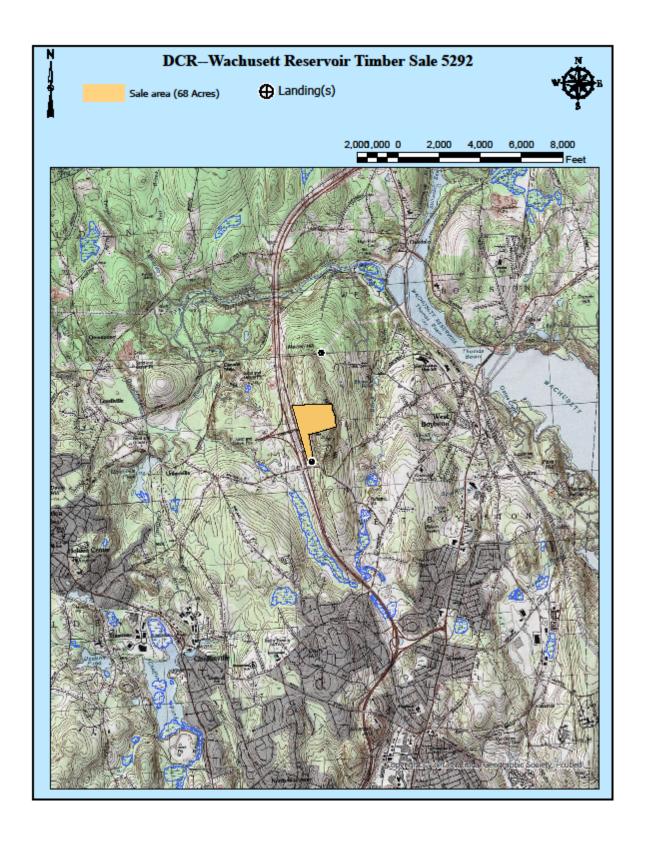


Figure 4. Pre-Harvest Photographs, A-B



A. Mature oaks marked for harvest which will release the better site situated white pine.



B. Marked oaks for harvest with mature white pine retention and a mix of hardwood and white pine regeneration.