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

Project Title: 5302

DWSP Harvest Permit Number: 5302 DWSP Proposal ID: WA-22-315

DCR Forest Cutting Plan File Number: 134-34023-23

Site Information

Watershed: Wachusett

Town(s): Holden

Acres: 40

Nearest Road: Dorothy Ave.

Natural Heritage Atlas overlap?: None

Public Drinking Water Supply Watershed?: Yes

Forest Types: White pine/Oak, Mixed Oak, White Pine Area of Critical Environmental Concern (ACEC)?: No

Soils: Windsor, Hinckley and Merrimac loamy sands and Sudbury fine sandy loam

Wetland Resources: Warren Tannery Brook and its associated wetlands form the western

boundary of this sale area.

Vernal Pools: None

Harvest Information

Harvest Start Date: 9/6/2022 Harvest End Date: 12/12/2024 Number of Wetland Crossings: None Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings: There are no stream crossings.

Filter Strips: There are no filter strips.

Wetland Crossings: There are no wetland crossings.

Harvesting in Wetlands: There is no harvesting in wetlands.

DWSP Forester supervising this harvest

Name: Greg Buzzell

Forester License number: 025 Phone number: 774-261-1841 Email: greg.buzzell@mass.gov

Narrative

General Description/Forest Composition/History

The forest overstory in this area is dominated by red oak, white pine, black oak, white oak and red maple. In the southern part of the area there is some black cherry and hemlock as well. In the northern end there are paper birch mixed into the overstory. Most of this property was logged about 30 years ago prior to DCR acquisition. The result has been the establishment of an excellent understory of regeneration. This regeneration is primarily hardwoods in the southern end made up of red maple, red oak, black cherry, bigtooth aspen and some white pine. There is also quite a lot of shadbush. In the northwestern corner of the area where many of the overstory trees have fire scars from a wildfire several decades in the past, there's significantly more oak in the understory. The central and northeastern parts of this area on the hill, along with having much shorter overstory trees also have a far larger component of white pine in the understory. The shrub layer in this area is made up of mt. laurel and huckleberry. In the lower areas in the south end of this working unit there is highbush blueberry along with the ubiquitous mountain laurel while sheep laurel is present with the mountain laurel in the previously burned northwest corner.

The age structure of this area is as follows; 0%, 0-20 years old; 0%, 21-40 years; 0%, 41-60 years; 13%, 61-80 years; 41%, 81-100 years and 46%, >100 years old. The oldest stands date to about 1900 making them just over 120 years old.

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 present comprised of a diversity of species well suited to this site, the goal is to make openings in the overstory, giving the young trees the space and light they need to continue to thrive. To that end, 10 openings are being made totaling 9.3 acres. These range in size from 0.4 to 1.77 acres. These openings are well distributed throughout the area taking advantage of where the advance regeneration is best. Large trees are being retained in most of these openings that are larger than ½ acre both singly and in small clusters. These trees provide valuable structural diversity to these openings and it is expected that most of these retained trees will be allowed to grow indefinitely into the future.

Cultural Resources

This lot was reviewed by the DCR archaeologist and all recommendations will be followed. There is no known cultural significance to this area, either historically or pre-European contact.

Rare or Endangered Species

Stick nests were noted and although they appeared to be inactive, care will be taken to protect any that are found prior to or during the harvest operation.

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)

For DCR U	se Only:		
File Number	34-34033-23	Case No.	
Date Rec'd	8.05.99	Nat. Hert.	/ N
Earliest Start	4.9.99	Nat. Hert. Imp.	\mathcal{L}
River Basin	NASHUA	Pub. Dr. Wat.	WACHUSETT
Gen. Obj.	LT	ACEC	N

Town Holden	rwn Holden Lot 5302				Name DCR/DWSP/OWM Wachuset/Sudbury				
RoadDurothy Av					Mailing Address 180 Beaman St.				
Acres40				10/22					
Vol. MBF 49.8 Vol. Cds 138 Vol. Tons 40					Town, State, Zip West Boylston, MA 01583				
					Phone 608-792-7806				
Plan Preparer				Ch61 Ch61A Stew "Casc#					
					. Est. Stumpage Value				
Name Gregory ?					Licensed Timber Harvester**				
Address 180 Beam	an Rd.	-	-						
					Name To be supplied when known.				
Town, State, Zip Wes					Address				
Phone						Town, State, Zip			
Type of Preparer Mas		Forester			Phone Mass, Lie, Harvester #				
*Mass. Forester Licens					**This information may be supplied after the plan is approved, but				
*Required for land und	er Ch61, Ch	h6lA or .	Forest St	ewardskip	work begins				
Stream Crossings					Harvesting in Wetlands				
Indicate location on map	SC-1	SC-2	SC-3	SC-4	indicate location on imap HW-1 HW-2 HW-3	HW-			
Type of Crossing					Porest Type (see pg 2)				
Existing Structure					Acres to be Harvested				
Type of Bottom					Rosic, Basal Area (>50%)				
Bank Height (ft)				1	(2002)				
Stabilization				1					
Wetland Crossin	igs				Service Forester Comments				
Indicate Insertion on map	WC-1	WC-2	WC-3	WC-4	Management of the second of th				
Length of Crossing					· PREASE MOTHER DOR SERVICE				
•					FORESTER AT START OF HARVE	ST			
Mitigation					OPERATION.				
Mitigation Stabilization	and the second								
Stabilization	18-1	1/8-2	FS-3	FS-4					
Stabilization Filter Strips	18-1	1/5-2	F8-3	FS-4					
Stabilization Filter Strips Indicate lacated or map	18-1	1/8-2	F8-3	F5-4					
Stabilization Filter Strips Indicate lacation or map Width (50', 100, or VA) Intend Capaca Type of	Ossailla Sh	nist ania	Malgr	rias	yerd Bettom Este				
Stabilization Filter Strips Indicate lacation to map Width (50', 190, or VA)	Ososius Stullveit ST		Maler FR OR	rias Prozen Dry	y se of Bottom Edits E. Leipe Applicant must provide DCR with a Ledevarz informatio Lower partition of a popular and actificing may begin LOW Must Some forestly activities, as the approach and conting and				

Products to be Harvested* *Note: Yolkines and values indicated in the Plm, are as reported by the plan preparer and have not been independently verified by the service foresternison approval. Mitf = thousand board foot. **Afbf/Cds** MDDCds Species Red Map 6 27.3 White Pino Cutting Standards Sagat Maple Red Pine ient 10.3 Pitch Pine Red Oak 1.4 Hamlook Block Oak ST-I ST-2 ST-3 Indicate locution on map WO 1.8 Withte Oak OM Spane Fotes: Type Other Street Uther Jidwd. Acres 32.ń 84 11 LT White Ash Tutal Mhf 49.8Landowner Objective 27 Booch Designation of Trees CT Cordwinal (Cds) 138 94 Туреціі Сп 8E SW Pulp (Toos) 40 White Birth Secres of Regeneration ΑD ΑE Bl& S Block IJW Pate (Pons) Chips (Tons) Black Cleary Landowner Signature The most important information on a custing plan is the Landowner's objective, as this will determine which treas 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 Massechuse 2. Forest Cutting Plan Information Sheel on page one, indicate your objective by checking the appropriate box below. ST - Short-term Harvest LT -- Lung-term Forest Management Planted management of the forest to achieve one or more of the Harvey, of nees with the main intention of presincing short-term income with minimal consideration given to following objectives: produce immediate and maximize long-total improving the future forest condition, which other results. income, enhance whethic habital, improve neo cational opportunities. project and and water quality, or produce forest specially products. in a forest dominated by peer quality and low value specie Lifwe; have rear, the Massachusons Coffing Plan Induntation Sheet, and are aware of try (our) management options. (see) hereby certify that I (we) have the Jeys'l authority to earny out the operation described above. I (we) certify that I (we) have notified the Conservation Connelssion in the town in which the operation is to take plane and the amounts of record within two buildred feet of the area to be harvested. I (we) understand that the volumes and values (Ch6) only) in this plan have not been independently verified by the service for aster ignor approval and will report thial values are, with his latter by his/hor agent if the final flaures if the from those reported. Signature of landbwiren(s) Final Report and Comments Determination and Status Thereby certify that the atose described Forest Carring Plan Approved Disapprevol. Expised and all relevant scattles have been substitutially extripted with. X \Box Conting 71 at Righethro of Service Forester/Pirechally Agon. ice Porewas/Duractor's Apont (<u>3) يوسرا بين رية (22</u>2 Ser. For Jus-Expires 1 20 Extension Assent recat Tikig waker of Trees Appe of Chit Рипла<u>ст Вертована</u>

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AD Administration

SS Nitherst Seed. PL Plant CO Copplies 1W Direct Seed

pg 4 of 5

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EF Book Basidary Of Other

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HomeHideed RM Rec Maple Blok Chemy Bb Poc. May 10 Co. May

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: DCR/OWSP

Town

Holden

1911e Number: 134-34003 03

	There are no stream crossings or wetland crossings planned.
MPs	
В	
Silviculture	In order to release advance regeneration, 10 openings in the overstary are being created, covering 9.3 acres. These openings range from 0.38 acre to 1.77 acres in size with an average of 0.93 acres. They are well distributed throughout the area taking advantage of the advance regeneration comprised of white pine, taking and other hardwoods. No cutting will occur between any of these patches.
Object	The 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.
Other	All haul roads as shown on the map have been flagged.

Department of Conservation and Recreation COMMONWEALTH OF MASSACHUSETTS

Division of State Parks and Recreation

FILE #134.34023.23



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 DCA DWSP (Name of Owner)

WEST BOYLSTON, MA

in accordance with the

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

CHNICA

with the Dept. of Conservation

DORUMY ANE IN 5302 and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the

Approval Date 9/12/22
Director's Agent CHRIS CAPONE
DCR Phone No. (857) 406-07-5

ISSUED BY:

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

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

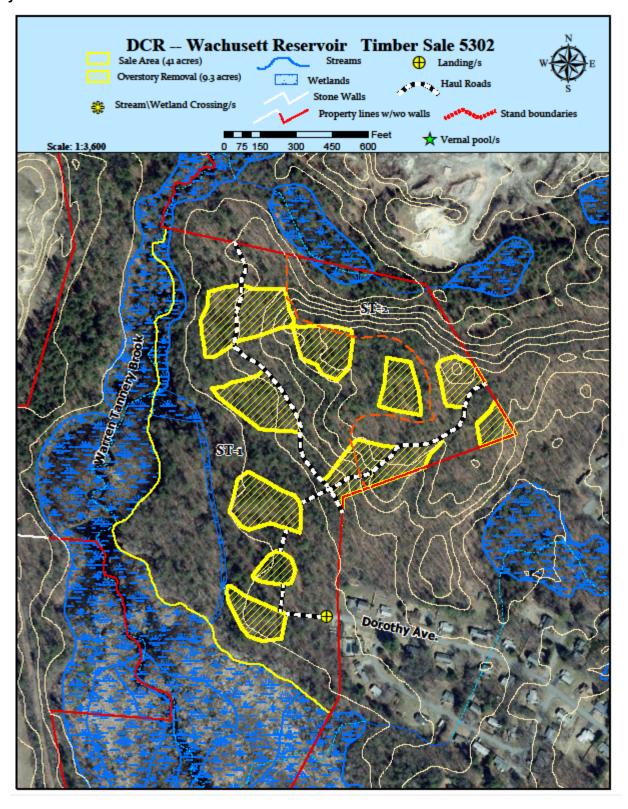


Figure 3. General locus map showing the location of the proposed timber harvest

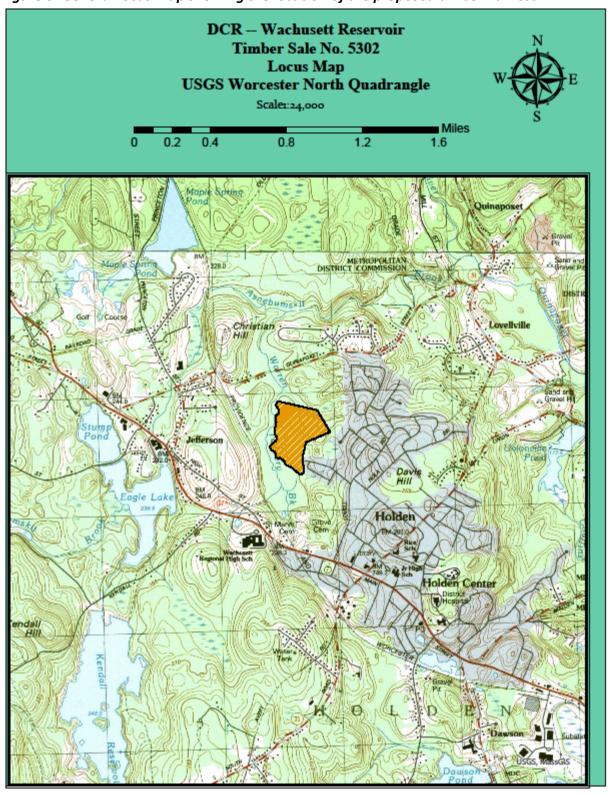


Figure 4. Pre-Harvest Photographs, A-C



A. Looking easterly into a 1.5-acre opening. There is good hardwood and pine regeneration present. Note the white pine in the right foreground which is being retained to provide valuable structural complexity.



B. Looking southwesterly from within a 1.2 acre opening along the west side of a well-used walking path.



C. Looking northeasterly from within the 1.77 acre opening in the far north end of the sale area. This is the area where a fire decades ago left many of the overstory trees with fire scars but there is also more oak in the understory.

Figure 5. Post-Harvest Photographs, A-C



A. The landing immediately after the last off the piled wood was removed.



B. The 1.77-acre opening were the fire occurred decades ago. There is good white pine and hardwood regeneration that is now free to grow. There is a white pine and several white oaks that are retained.



C. A good amount of the larger white pine and hardwood saplings were undamaged during the operation. The large white pine in the left of the picture was retained and will provide a long-term source of seed as well as structural diversity of decades to come.