

**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

Area of Critical Environmental Concern (ACEC)?: No

Soils: Paxton fine sand loam, Chatfield-Hollis-Rock

Wetland Resources: There's a small unmapped wetland.

Vernal Pools: None

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 number: 025

Phone number: 774-261-1841

Email: greg.buzzell@mass.gov

Narrative

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.

Rare or Endangered Species

None known.

Figures

- Figure 1. Forest Cutting Plan
- Figure 2. Maps 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

Figure 1. Forest Cutting Plan

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 Use Only:

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

Site Information

Location

Town West Boylston Lot 5297
Road Hartwell Street
Acres 40 Proposed Start Date 9/01/21
Vol. MBF 49 Vol. Cds. 186 Vol. Tons 22

Plan Preparer

Name Russell Wilmot
Address 180 Beaman St.

Town, State, Zip West Boylston, MA, 01583
Phone 508-792-7806 Ext 318
Type of Preparer Mass. Licensed Forester
*Mass. Forester License # 426
*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

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

Town, State, Zip West Boylston, MA 01583
Phone 608-792-7806
Ch61 Ch61A Stew *Case # _____
Est. Stumpage Value _____

Licensed Timber Harvester**

Name Will be provided when known
Address _____
Town, State, Zip _____
Phone _____
Mass. Lic. Harvester # _____

**This information may be supplied after the plan is approved, but before work begins.

Best Management Practices

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing				
Existing Structure				
Type of Bottom				
Bank Height (ft)				
Stabilization				

Wetland Crossings

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
Width (50', 100', or VA)				

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

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud
LO Landowner	PO Poled	ST Stone		GR Gravel
OT Other	OT Other	HB Hay Bales		OT Other
		OT Other		

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. Consult MA Forestry BMP Manual for further information.

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

Forest Products

Products to be Harvested*

Table with columns: Species, Mbf/Cds, Mbf/Cds. Rows include White Pine, Red Pine, Pitch Pine, Hemlock, Spruce, Other Sftwd., White Ash, Beech, White Birch, B & Y Birch, Black Cherry.

*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.

Stand Treatment

Cutting Standards

Table with columns: Indicate location on map, ST-1, ST-2, ST-3, ST-4. Rows include Forest Type, Acres, Landowner Objective, Designation of Trees, Type of Cut, Source of Regeneration.

Landowner

Landowner Signature

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.

[X] 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.

Signature of landowner(s) [Handwritten Signature]

Date 7/6/21

Service Forester

Determination and Status

Approved Disapproved Expires Cutting Plan [] [] []

Signature of Service Forester/Director's Agent Date

Extension 1 [] 2 [] Expires Ser. For. Ints.

Amendment App 1 Dis 1 App 2 Dis 2

Final Report and Comments

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 Date

Codes

Table with columns: Forest Types, Designation of Trees, Type of Cut, Intermediate Harvests, Source of Regeneration. Rows include WP, WK, WH, WO, RP, SR, HK, HH, BC, BB, OH, OR, OM, RM, BE, SF, SM, PP, CT, LT, SB, OT, LT, ST, SH, ST, CC, SE, SA, SN, CT, NT, Non-Standard Systems*, DL, OT.

*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

Landowner: _____

Town: _____

File Number: _____

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

BMPs	<p><u>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 land just north of DWSP property the stream has been dug out in the past and is better defined. There is no cutting planned near this stream and it will not be crossed.</u></p> <p><u>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.</u></p>
Silviculture	<p><u>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.</u></p> <p><u>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.</u></p>
Objectives	<p><u>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.</u></p> <p><u>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.</u></p>
Other	<p><u>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 Agreement.</u></p> <p><u>ST-3 is a young stand and no cutting will occur.</u></p>

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

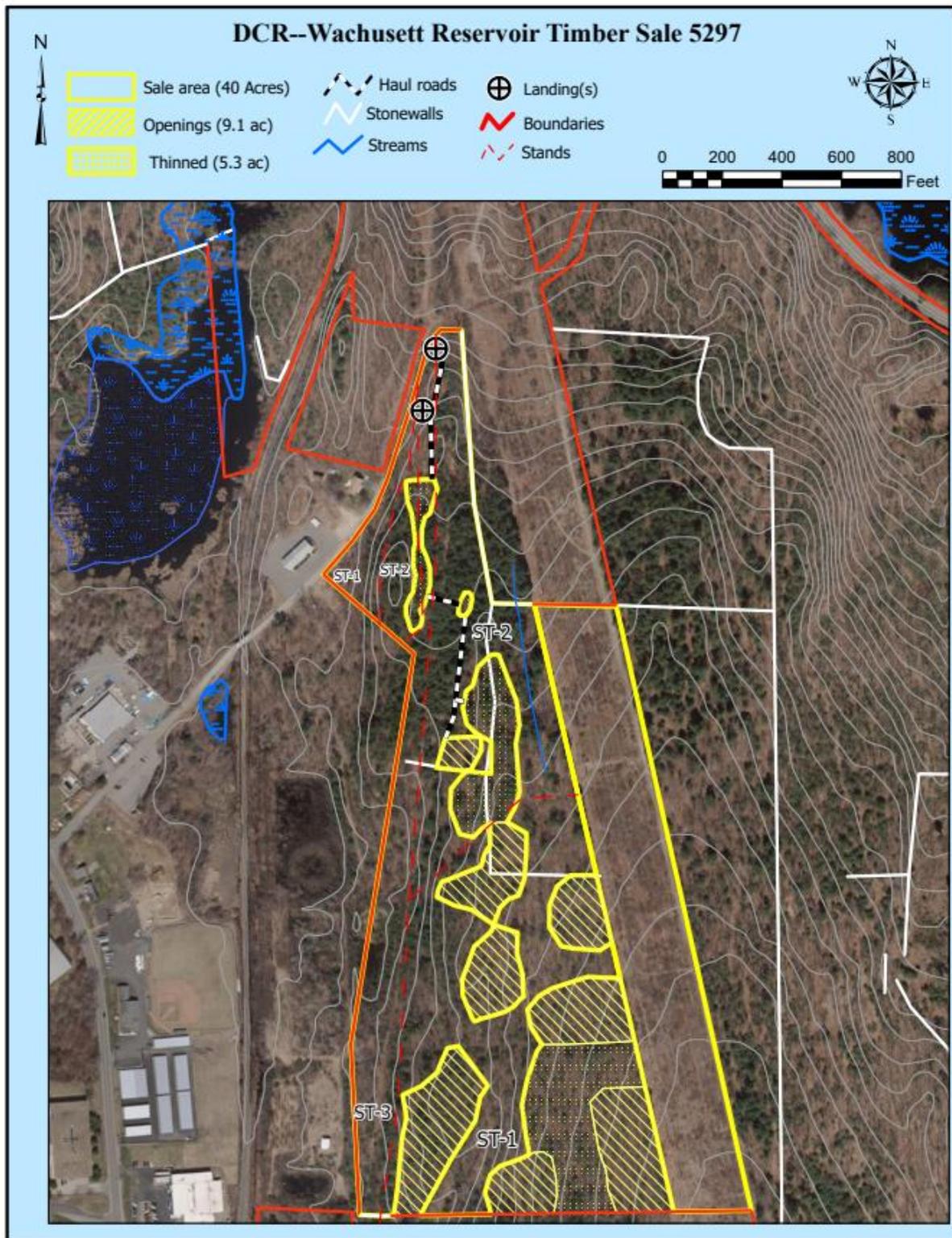


Figure 3. General locus map showing the location of the proposed timber harvest

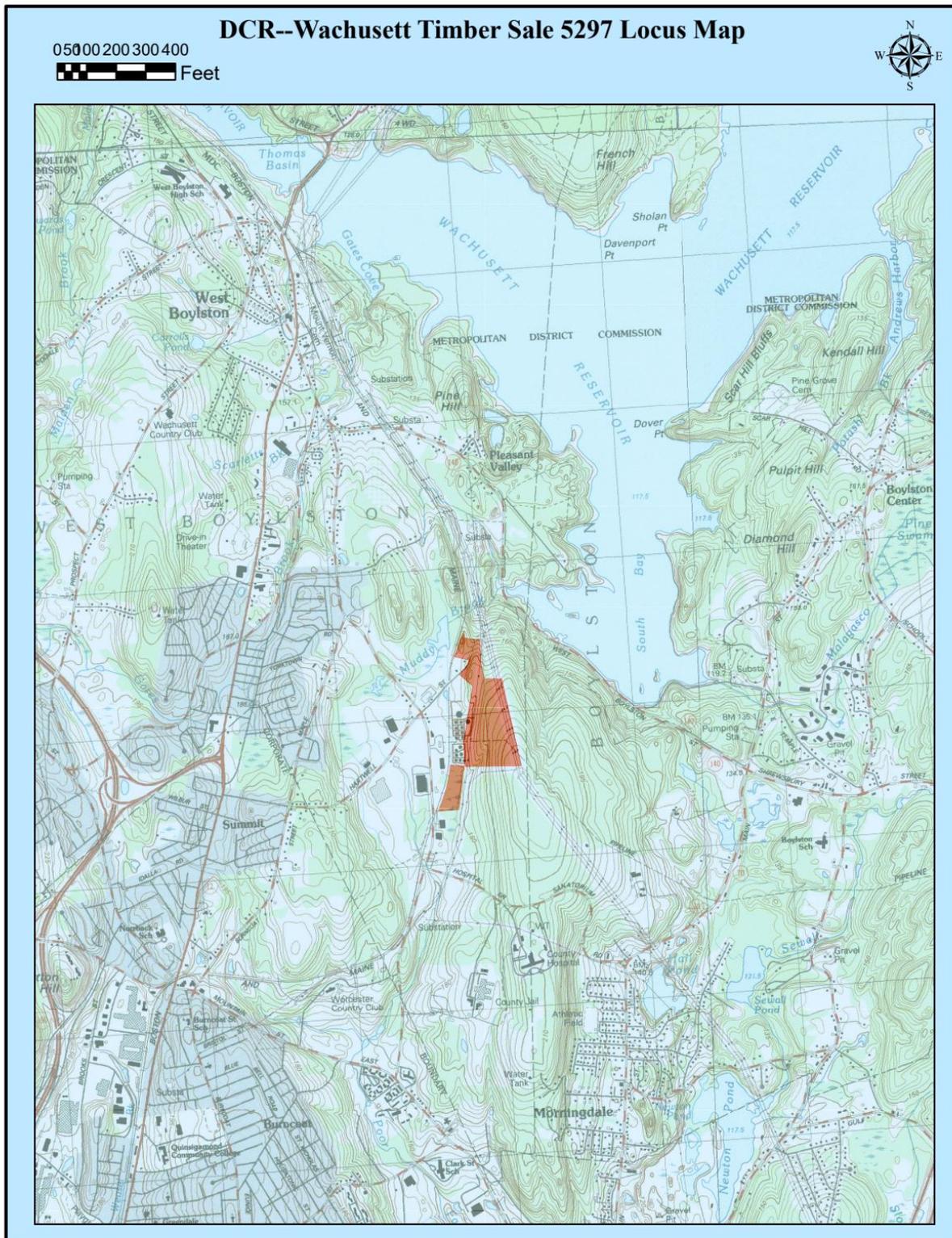


Figure 4. Pre-Harvest Photographs, A-C



A. 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.