

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

Project Title: Lot 5295

DWSP Harvest Permit Number: 5295

DWSP Proposal ID: WA-21-231

DCR Forest Cutting Plan File Number: 134-32366-21

Site Information

Watershed: Wachusett

Town(s): Holden

Acres: 59

Nearest Road: Princeton Street

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: Mixed oak, Mixed hardwoods

Area of Critical Environmental Concern (ACEC)?: No

Soils: Canton fine sandy loam and Hinckley sandy loam

Wetland Resources: Bear Swamp and Bear Brook

Vernal Pools: There are three potential vernal pools.

Harvest Information

Harvest Start Date: 06/23/2021

Harvest End Date: 06/60/2023

Number of Wetland Crossings: None

Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings: None

Filter Strips: None

Wetland Crossings: None

Harvesting in Wetlands: None

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 property was purchased by the MDC in 1993 just about the same time that a severe wildfire burned through much of these 59 acres. This area had also been heavily logged prior to MDC acquisition. The result of these two disturbances was the establishment of an excellent understory of primarily hardwood regeneration although white pine is present as well. In fact, the forest cover type on 19 acres of this area is a 26 year-old mixed hardwood stand comprised of red, black and white oaks, paper birch, gray birch and red maple. There are scattered surviving white pine above this young stand. The overstory on the remaining 36 acres is a mixed oak stand comprised of red, black and white oaks, with fewer red maple, sassafras, white pine and hemlock. Many of the trees in this stand, except for the eastern and northern lower slopes nearer to Bear Swamp, have severe fire scars on the butts. The dominant understory shrub is mountain laurel along with witch-hazel and highbush blueberry.

On the minority of the 36 acre mixed oak stand where there is not thick advance regeneration, there is a thick mountain laurel understory, particularly in the northern end of the area. Witch-hazel is the dominant shrub on the lower, eastern slopes near Bear Swamp.

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

Given the excellent and diverse understory of saplings, openings will be made in the overstory throughout this area. These openings range in size from 0.45 to 2.5 acres and total 13.5 acres. This will result in the establishment of a new age class on 24% of this management unit.

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.

Rare or Endangered Species

With the large number of old, fire-scarred trees, there should be no shortage of cavity trees in this area.

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. Post-Harvest Photographs, A-B

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	Holden	Lot	5295
Road	Princeton Road		
Acres	59.0	Proposed Start Date	06/21
Vol. MBF	36.1	Vol. Cds.	194
		Vol. Tons	5

Plan Preparer

Name	Gregory S. Buzzell
Address	180 Beaman Rd.

Town, State, Zip West Boylston, MA, 01583

Phone 774-261-1841

Type of Preparer Mass. Licensed Forester

*Mass. Forester License # 25

*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	<input type="checkbox"/>	Ch61A	<input type="checkbox"/>	Stew	<input type="checkbox"/>	*Case #	<u></u>
Est. Stumpage Value <u></u>							

Licensed Timber Harvester**

Name	To be supplied when known.
Address	<u></u>
Town, State, Zip	<u></u>
Phone	<u></u>
Mass. Lic. Harvester #	<u></u>

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

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)				

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
IH 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

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Best Management Practices

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

Forest Products

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	2.3	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	16.9
Hemlock		Black Oak	10.6
Spruce		White Oak	6.2
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	36.1
Beech		Cordwood (Cds)	194
White Birch		SW Pulp (Tons)	5
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

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. 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.

4/29/2021

Service Forester

Determination and Status

Approved	Disapproved	Expires
<input type="checkbox"/>	<input type="checkbox"/>	_____

Signature of Service Forester/Director's Agent Date

Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires /	Ser. For. Ints. /
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Amendment	App 1 <input type="checkbox"/>	Dis 1 <input type="checkbox"/>	App 2 <input type="checkbox"/>	Dis 2 <input type="checkbox"/>	/
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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

Forest Types	HK	Hemlock	OM	Mixed Oak	Designation of Trees	CT	Cut Tree	SH	Shelterwood	Intermediate Harvest:	AD	Advanced	
WP	White Pine				CT	Cut Tree	ST	Seed Tree	CT	Commercial Thin	SE	Natural Seed	
WK	WP/Hem	Hem	Hdwd	RM	Red Maple	LT	Leave Tree	ST	Stand Boundary	NT	Non Comp Thin	PL	Plant
WH	WP/Hdwd	BC	Blick Cherry	BE	Beech	CC	Clear Cut	SE	Selection	Non-Standard Systems: [*]	CO	Coppice	
WO	WP/Oak	BB	Bee Bir/Msp	SF	Spruce/Fir	OT	Other	SA	Salvage	HG Highgrade*	DS	Direct Seed	
RP	Red Pine	OH	Oak Hdwd	SM	Sugar Maple	Landowner Objective	SN	Sanitation	DL	Diameter Limit*	OT	Other	
SR	Red Spruce	OR	N Red Oak	PP	Pitch Pine	LT	Long-term Mgt.	OT	Other*				
					ST	Short-term Har.							

^{*}If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page

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*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	OM	MH		
Acres	43	16		
Landowner Objective	LT	LT		
Designation of Trees	CT	OT		
Type of Cut	SH	OT		
Source of Regeneration	AD	OT		

Stand Treatment

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: _____

Town: _____

File Number: _____

Other Objectives	Silviculture	BMPs
		<p>No trees are being cut within 100' of either of the vernal pools at the south end of the sale area.</p>
		<p>In order to release advance regeneration, 12 openings in the overstory are being created, covering 13.5 acres. These openings range from 0.4 to 2.5 acres in size with an average of 1.1 acre. They are well distributed throughout the sale area focusing on where the advance regeneration is well established. No trees are being cut in the forest between the openings.</p>
		<p>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.</p>
		<p>The forwarder haul road from the landing to the old railroad bed has been flagged. The forwarder haul roads between the openings have been not flagged as it is not necessary given the proximity of the openings to each other. No trees are being cut in ST-2.</p>

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

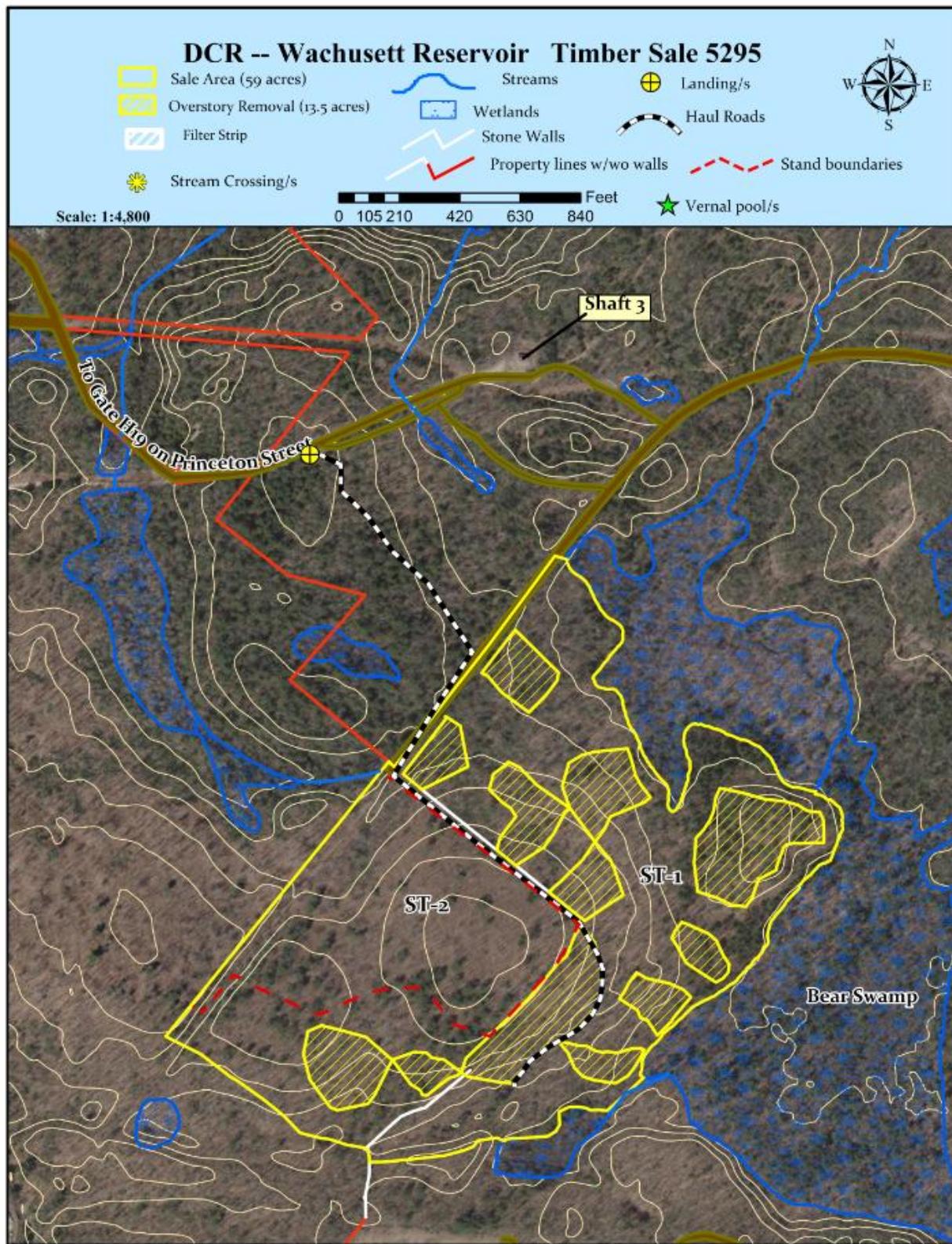


Figure 3. General locus map showing the location of the proposed timber harvest

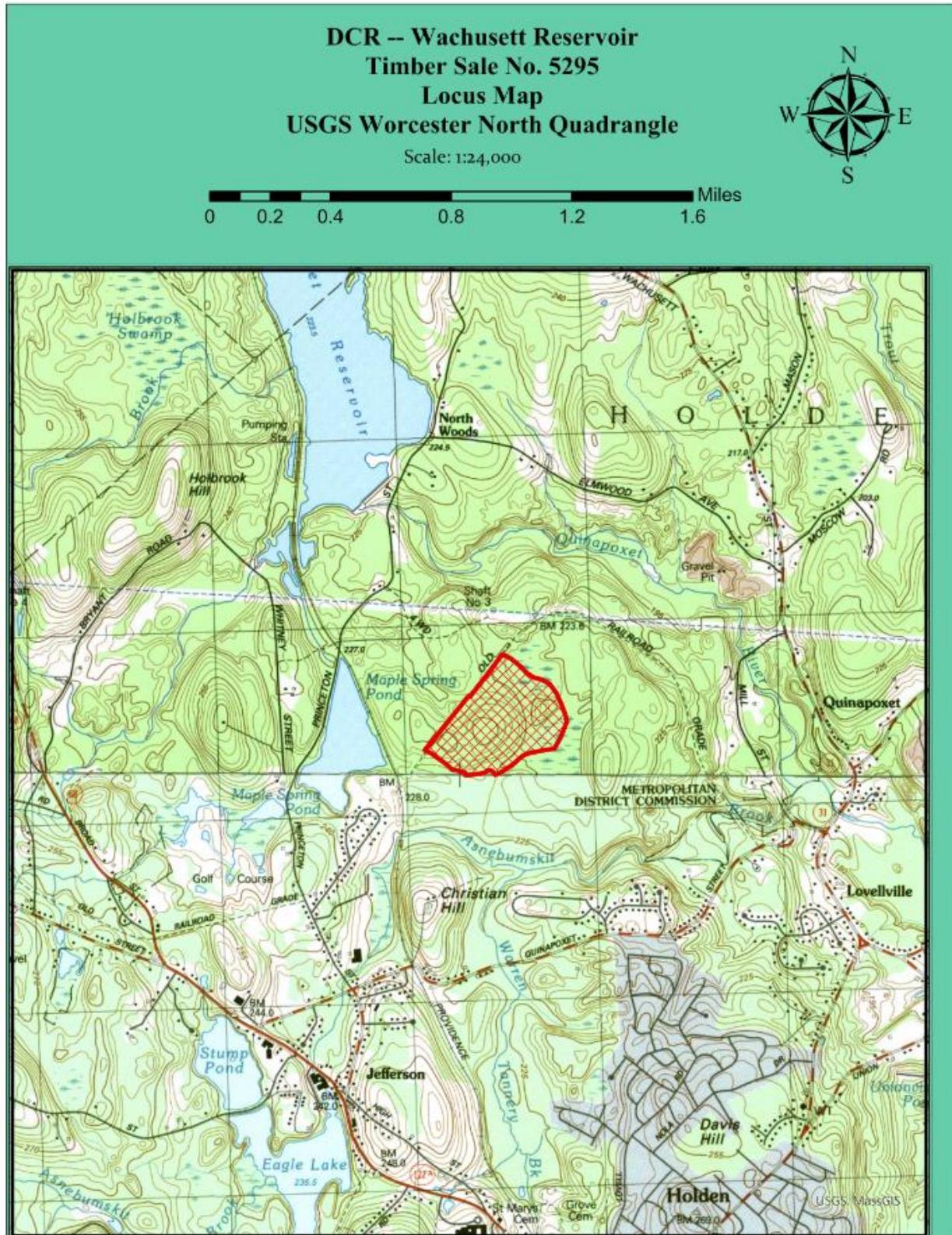


Figure 4. Post-Harvest Photographs, A-B



A. These young white pines and hardwoods now have the light and space they need to continue to thrive.



B. These oak seedlings became established in one of the overstory openings during the fall of 2021 when this timber sale was completed.