

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

Project Title: Lot 5293

DWSP Harvest Permit Number: 5293

DWSP Proposal ID: WA-19-250

DCR Forest Cutting Plan File Number: 241-32280-21

Site Information

Watershed: Wachusett

Town(s): Princeton

Acres: 94

Nearest Road: Beaman Road

Natural Heritage Atlas overlap?: No

Public Drinking Water Supply Watershed?: Yes

Forest Types: Mixed Hardwoods, Oak Hardwoods

Area of Critical Environmental Concern (ACEC)?: No

Soils: Mostly Woodbridge and Paxton till

Wetland Resources: Yes

Vernal Pools: None known.

Harvest Information

Harvest Start Date: 03/31/2021

Harvest End Date: 06/30/2023

Number of Wetland Crossings: None

Number of Stream Crossings: Two

Best Management Practices Applied

Stream Crossings: One stream crossing is at an existing culvert which will be protected through the addition of timber bridges. The other stream crossing will be protected with timber bridges also.

Filter Strips: No trees are being cut in the filter strips.

Wetland Crossings: Not applicable.

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

Most of this area is a mixed hardwood stand comprised of a wide range of species including red oak, red maple, white oak, black birch, paper birch, yellow birch, black cherry, white ash and hickory (both shagbark and pignut) and sugar maple. There is even a bit of black gum in and near the wetland in the north end of the sale area. The oak/hardwood stands are similarly diverse but overall have a greater component of red oak. The understory is highly variable with areas of good advance regeneration, areas dominated by mountain laurel and areas with a variety of understory shrubs such as maple-leaved viburnum and hobblebush along with ferns. Most of this area was logged in the late 1980s when it appears a lot of white pine was removed. There are numerous stone walls throughout this area clearly indicating that this was all once pasture. One pasture, in the far south end of this sale area was abandoned in about 1920. The forests in the other wall-off pastures originated from 1935 to 1940 following abandonment.

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

This area is the sub watershed that has been chosen for treatment in the long-term paired watershed study. As such, no more than 25% of the total stocking in this sub watershed can be removed in this operation. Given that, 20 openings in the overstory have been made that cover a combined nearly 24 acres. These range in size from 0.36 to 2.3 acres with an average size of 1.2 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

Stone walls are present.

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-C

Figure 1. Forest Cutting Plan

<h2 style="margin: 0;">Forest Cutting Plan</h2> <p style="margin: 0;">and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00 (Effective Date: 1/1/04)</p>		For DCR Use Only: File Number _____ Case No. _____ Date Rec'd _____ Nat. Hart. _____ / _____ Earliest Start _____ Nat. Hart. Imp. _____ River Basin _____ Pub. Dr. Wat. _____ Gen. Obj. _____ ACEC _____																																																		
Site Information	Location Town <u>Princeton</u> Lot <u>5293</u> Road <u>Beaman Road</u> Acres <u>94</u> Proposed Start Date <u>9/20</u> Vol. MBF <u>141.9</u> Vol. Cds. <u>302</u> Vol. Tons <u>209</u>	Landowner Name <u>DCR/DWSP/OWM Wachusett/Sodbury</u> Mailing Address <u>180 Beaman St.</u> Town, State, Zip <u>West Boylston, MA 01583</u> Phone <u>608-792-7806</u> Ch61 <input type="checkbox"/> Ch61A <input type="checkbox"/> Stew <input type="checkbox"/> *Case # _____ Est. Stumpage Value _____																																																		
	Plan Preparer Name <u>Gregory S. Bunnell</u> Address <u>180 Beaman Rd.</u> Town, State, Zip <u>West Boylston, MA, 01583</u> Phone <u>774-261-1841</u> Type of Preparer <u>Mass. Licensed Forester</u> *Mass. Forester License # <u>25</u> *Required for land under Ch61, Ch61A or Forest Stewardship	Licensed Timber Harvester** Name <u>To be supplied when known.</u> Address _____ Town, State, Zip _____ Phone _____ Mass. Lic. Harvester # _____ **This information may be supplied after the plan is approved, but before work begins.																																																		
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Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	84.6	Red Maple	6.4
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	39.8
Hemlock		Black Oak	1.2
Spruce		White Oak	
Other Sftwd.	2.1	Other Hdw.	
White Ash		Total Mbf	141.9
Beech		Cordwood (Cds)	302
White Birch		SW Pulp (Tons)	209
B & Y Birch	7.7	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	MI	OH	OR	RM
Acres	57	25	6.3	5.7
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	CT	CT	OT
Type of Cut	SH	SH	SH	n/a
Source of Regeneration	AD	AD	AD	n/a

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 (Chf 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 and Status

	Approved	Disapproved	Expires
Cutting Plan	<input type="checkbox"/>	<input type="checkbox"/>	
Signature of Service Forester/Director's Agent	Date		
Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires <input type="checkbox"/> Ser. For. Ints. <input type="checkbox"/>
Amendment	App 1 <input type="checkbox"/>	Dis 1 <input type="checkbox"/>	App 2 <input type="checkbox"/> Dis 2 <input type="checkbox"/>

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

Forest Types				Designation of Trees	Type of Cut	Intermediate Harvest	Source of Regeneration
WP White Pine	HK Hemlock	OM Mixed Oak	CT Cut Tree	SH Shelterwood	Intermediate Harvest	AD Advanced	SE Natural Seed
WK White Pine	HH Hemlock	RM Red Maple	LT Leave Tree	ST Seed Tree	CT Commercial Thin	SE Natural Seed	PL Plant
WH White Pine	BC Black Cherry	BE Beech	SB Stand Boundary	CC Clear Cut	NT Non Com Thin	CO Coppice	DS Direct Seed
WO White Oak	BB Black Birch/Maple	SP Spruce/Fir	OT Other	SE Selection	Non-Standard Systems*	OT Other	
RP Red Pine	OH Oak/Hemlock	SM Sugar Maple	Landowner Objective	SA Salvage	HG Highgrade*	DL Diameter Limit*	
SR Red Spruce	OR N Red Oak	PP Pitch Pine	LT Long-term Mgt.	SN Sanitation	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

pg 4 of 5

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

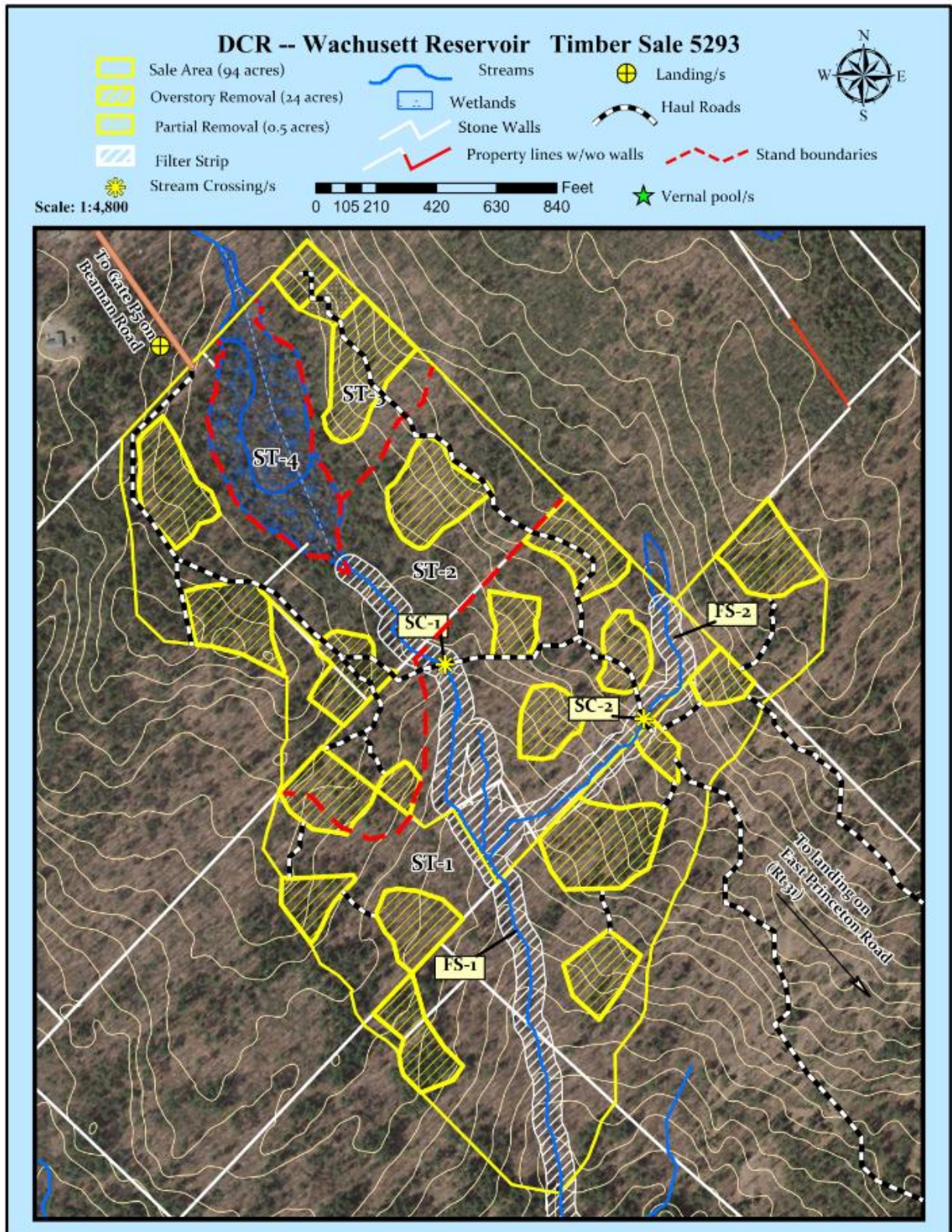


Figure 3. General locus map showing the location of the proposed timber harvest

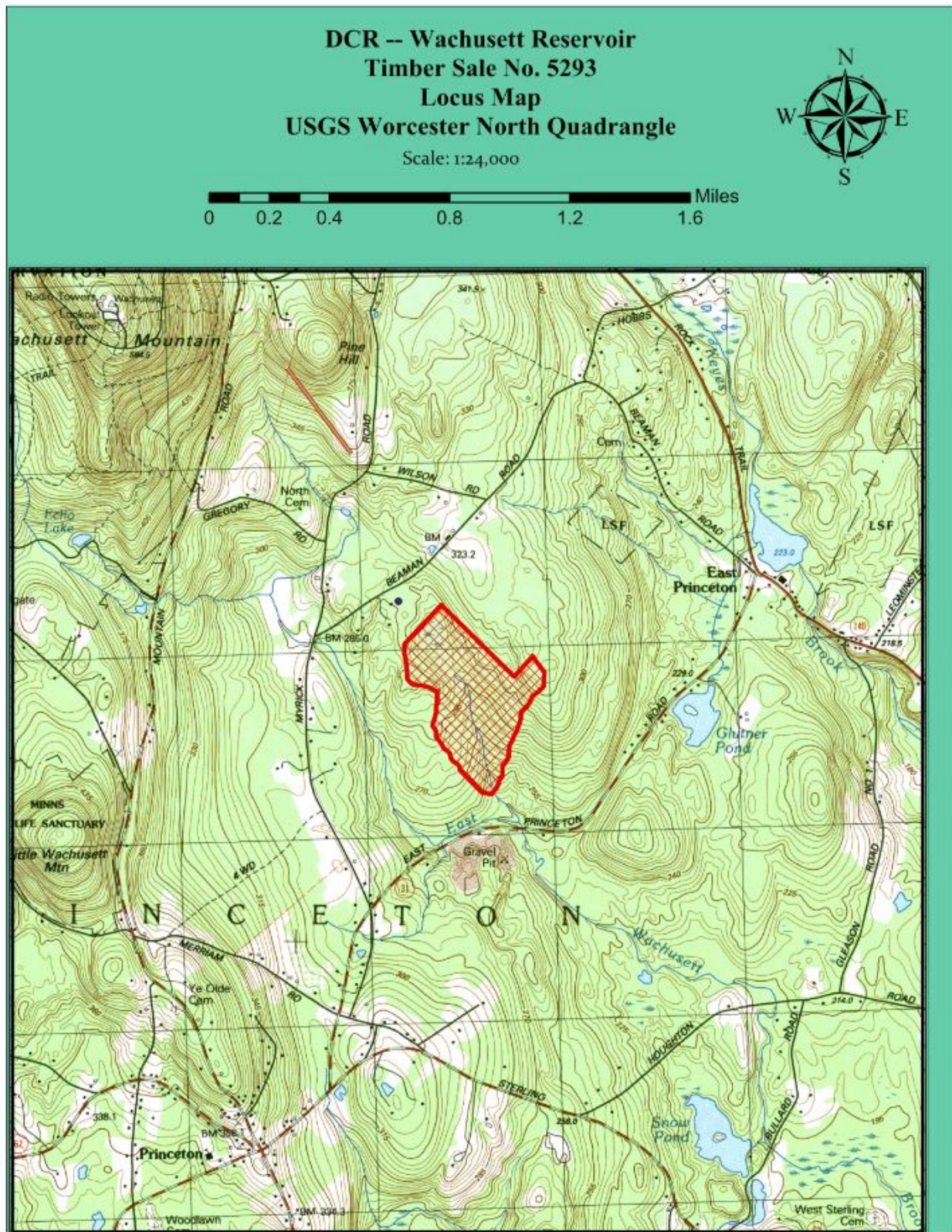


Figure 4. Pre-Harvest Photographs, A-C



A. Weir that was installed to monitor stream flow.



B. White pine regeneration waiting to be released along with some oak and hickory retention.



C. Large diameter white pine marked to release the mix of white pine and hardwood regeneration.

Figure 5. Post-Harvest Photographs, A-C



A. The landing after work in the woods was completed. There is still wood at the landing and timber bridge mats that were used at the stream crossing to be removed



B. An area of overstory removal with large sapling/small pole-sized black birch that were retained.



C. Another area of overstory removal with retained trees of a variety of species.