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:
Filter Strips:
Wetland Crossings:
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

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. Insp.	
River Basin		Pub. Dr. Wat.	
Gen. Obj.		ACEC	

Site Information

Location

Town: Princeton Lot 5293
Road: Beaman Road
Acres: 94 Proposed Start Date: 9/20
Vol. MBF: 141.9 Vol. Cds.: 302 Vol. Tons: 209

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: 508-792-7806
Ch61 ☐ Ch61A ☐ Stew ☐ *Case #:
Est. Stumpage Value:

Licensed Timber Harvester**

Name: To be supplied 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	CU	BR		
Existing Structure	Yes	No		
Type of Bottom	n/a	ST		
Bank Height (ft)	n/a	1		
Stabilization	OT	CO		

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%?)				

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing				
Mitigation				
Stabilization				

Service Forester Comments

Filter Strips

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or VA)	VA	VA		

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*

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 Hdwd.	
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.

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	MH	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

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 (Cb61 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 2/19/2021

Service Forester

Determination and Status

	Approved	Disapproved	Expires
Cutting Plan	☐	☐	_____

_____ _____
Signature of Service Forester/Director's Agent Date

			Expires	Ser. For. Intx.
Extension	1☐	2☐	/	/

	App 1	Dis 1	App 2	Dis 2	
Amendment	☐	☐	☐	☐	/

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
WP White Pine
WK WP/Hem
WH WP/Hdwd
WO WP/Oak
RP Red Pine
SR Red Spruce
HK Hemlock
HH Hem/Hdwd
BC Blck Cherry
BB Bas/Tir/Map
OH Oak/Hdwd
OR N Red Oak
OM Mixed Oak
RM Red Maple
BE Beech
SF Spruce/Fir
SM Sugar Maple
PP Pitch Pine

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

Landowner Objective
LT Long-term Mgt.
ST Short-term Har.

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*
OT Other*

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

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

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

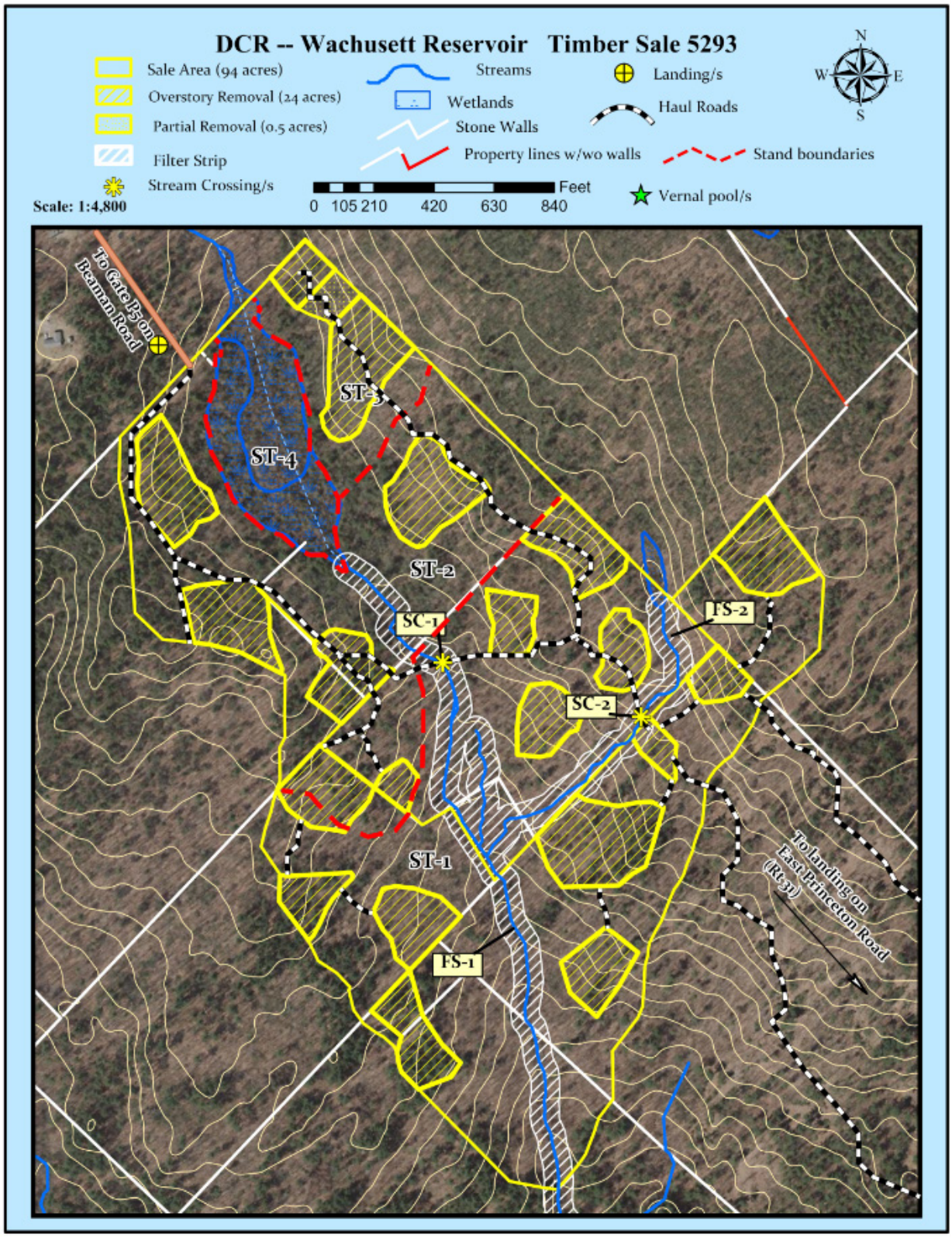

Figure 3. General locus map showing the location of the proposed timber harvest.

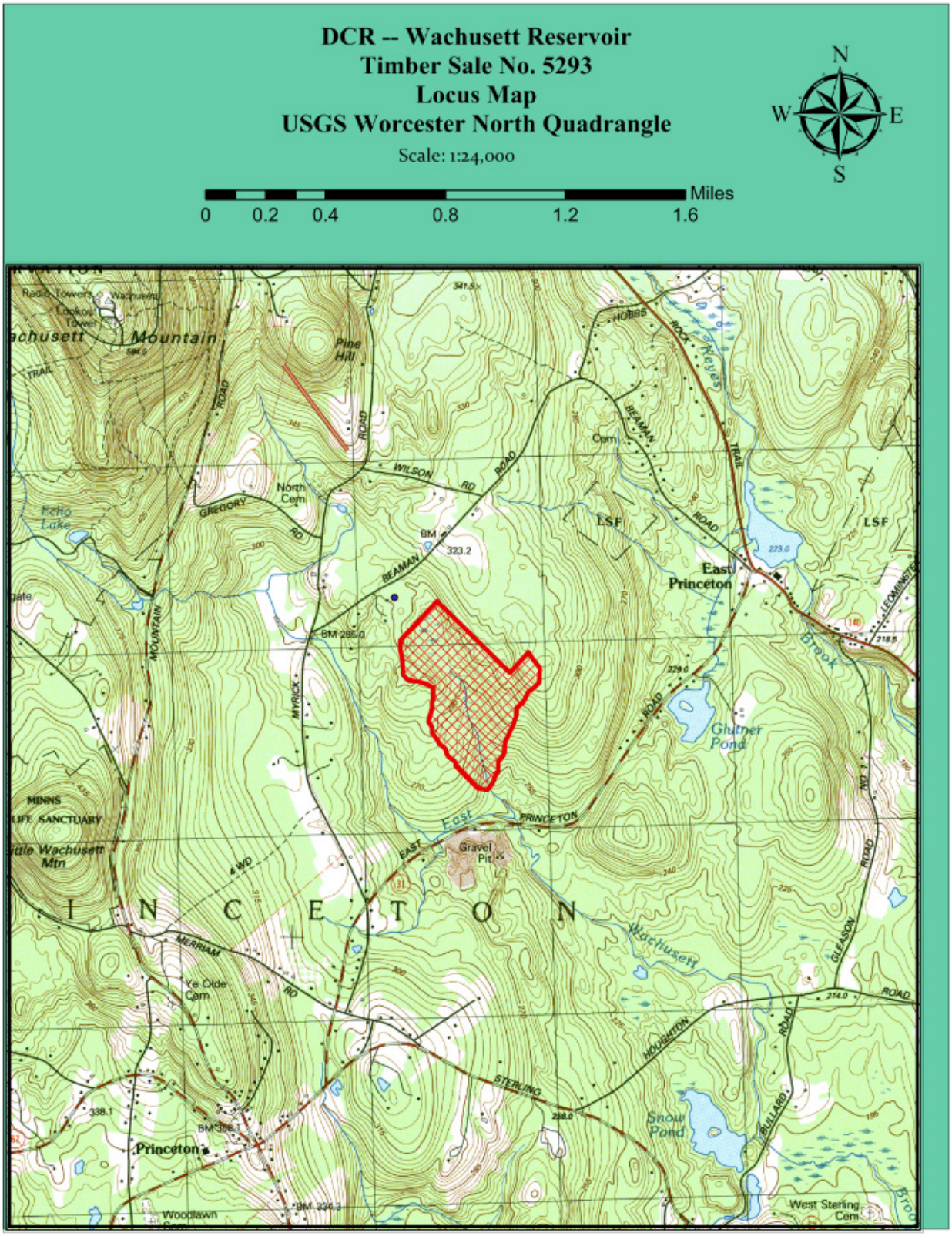

Figure 4. Pre-Harvest Photographs, A-C

A. Weir that was installed in order 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.