Massachusetts Department of Conservation and Recreation

Division of Water Supply Protection, Office of Watershed Management

Forest Management Project Summary

Project Title:

DWSP Harvest Permit Number: Lot 5276
DCR Forest Cutting Plan File Number: 134-9499-19

Site Information

Watershed: Wachusett	**Town(s)**: Holden
Acres: 20.6	**Nearest Road: Harris Street**
Natural Heritage Atlas overlap?:Yes	**Public Drinking Water Supply Watershed?:** Yes
Forest Types:White pine-Oak; White pine-Mixed Hardwood	**ACEC?: No**
Soils: Merrimac and Hinckley excessively drained sandy loams	
Wetland Resources: There are no wetland resources	
Vernal Pools: There is one vernal pool adjacent to Harris Street, south of the intersection with Paul Street.	

Harvest Information

DWSP Permit Start Date: 09/21/18	**DWSP Permit End Date: 12/04/20**
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 #:025
Phone #:774-261-1841

NARRATIVES

General Description/Forest Composition/History:

This property was part of the original takings when the Wachusett Reservoir was constructed and was previously owned by the Linus M. Harris Manufacturing Company. Linus ran a cotton mill and then later on it turned into a shoddy mill which was demolished in 1902. The 1938 hurricane survey showed "scattering damage" on this parcel although no visible evidence was noted. It was first mapped in 1951 as white pine. This area was cut in 1996 and has resulted in good oak regeneration in the lower elevations and good pine in the higher elevations. This property currently has very good quality white pine throughout. Red and black oak is smaller on the hilltops (40'-55') and of much better quality, health and height in the lower elevations. Smaller components of sugar maple, red maple, white oak, and hemlock are interspersed. In the southern section mountain laurel is thick, although regeneration is taller than the laurel except for a few small pockets. Gypsy moth and hemlock wooly adelgid was found in this area. Regeneration sampling found good regeneration is present on 47% of 47 plots taken and those were well distributed. Marginal advance regeneration is present on an additional 21% of the plots. Oak regeneration was present on 49% of the plots. Regeneration is lacking in 23% of the plots due to native interfering plants (mountain laurel) and they were found primarily in the south western area of the working unit. The regeneration is made up of hemlock, red maple, white pine, white oak, black oak, and red oak.

The age structure is as follows; 7% 0-20 years old, 0% 21-40 years old, 0% 41-60 years old, 0% 61-80 years old, 93% 81-100 years old, 0% >100 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.

This area was chosen due to the lack of young forest both in these 20.6 acres as well as the 2,092 DCR-owned acres that flow into the Quinapoxet River.

Silvicultural Objectives:

Because there is such widespread advance regeneration in this small working unit, openings are being made throughout in order to release the advance regeneration in this working unit. To this end, 7 openings are being made. They range in size from 0.2 to 1.2 acres and average 0.6 acres in size.

Cultural Resources:

None.

Wildlife/Rare or Endangered Species:

NHESP has determined that certain state-listed sensitive species or habitats may exist within the lot proposal area. To protect them from unnecessary disturbance, detailed information regarding affected species and their locations is not included in this report. DWSP will coordinate with NHESP and follow recommendations to protect these species during the proposed activity. DWSP's Conservation Management Practices regarding vernal pools are being followed.

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	82-4409-19	Case No.	
Date Rec'd	8/22/18	Nat. Hert.	YES /
Earliest Start	9/9/18	Nat. Hert. Imp.	YES
River Basin	NASHUA	Pub. Dr. Wat.	WACHUSETT
Gen. Obj.	LT	ACEC	NO

ALB AREA

Site Information

Location

Town Holden Lot 5276
Road Harris Street
Acres 21 Proposed Start Date 9/10/18
Vol. MBF 65.5 Vol. Cds. 63 Vol. Tons 8

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 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				
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

* ALL SKID ROAD STRAILS ARE EXISTING
* SEE ATTACHED NHESP LETTER FOR DETAILS
* OPERATION OF MOTORIZED VEHICLES SITE-WIDE SHALL be conducted only during the time period beginning NOVEMBER 15 TO MARCH 15.
* LICENSED TIMBER HARVESTER MUST be in ALB COMPLIANCE

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	60.9	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	3.3
Hemlock		Black Oak	1.2
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		**Total Mbf**	65.5
Beech		**Cordwood (Cds)**	63
White Birch		**SW Pulp (Tons)**	8
B & Y Birch		**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	WO	WH		
Acres	17	4		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SH	SH		
Source of Regeneration	AD/SE	AD/SE		

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.

Patricia E Austin — 3-22-18
Signature of landowner(s) — Date

Service Forester

Determination and Status

	Approved	Disapproved	Expires
Cutting Plan	☒	☐	3-22-2020

Signature of Service Forester/Director's Agent — 3-22-2018 Date

			Expires	Ser. For. Ints.
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 Bee/Bir/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

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: _____

BMPs

The landings will be on Paul Street off of Harris Street.

Silviculture

The operation will establish openings in a sale area that was cut previously in 1998. The cut responded with mostly white pine regeneration in the higher elevations with dry soils and hardwood regeneration on the lower sections with more moisture in the soil. This is desirable as white pine is healthier on dry soils and the hardwoods grow better on the richer soil sites.

Objectives

To create openings and take another step in the process of creating three age classes overall (the watershed's ultimate goal). The current age structure is limited with an insufficient component of young forest.

Other

The Natural Heritage layer covers the very top of this sale area (#547). It is most likely associated with the Quinapoxet river across the street from the sale.

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

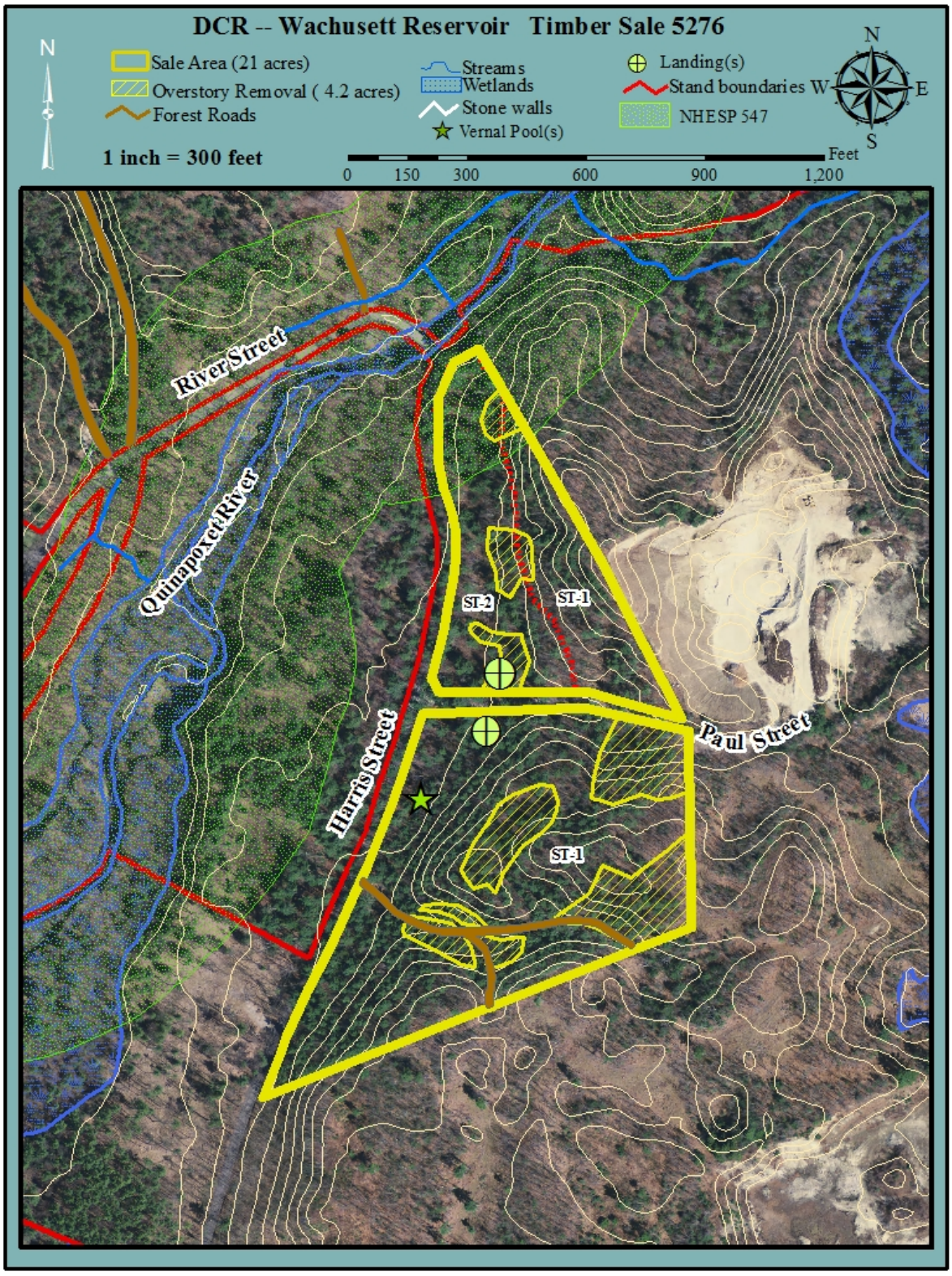

Figure 3. General locus map showing the location of the proposed timber harvest

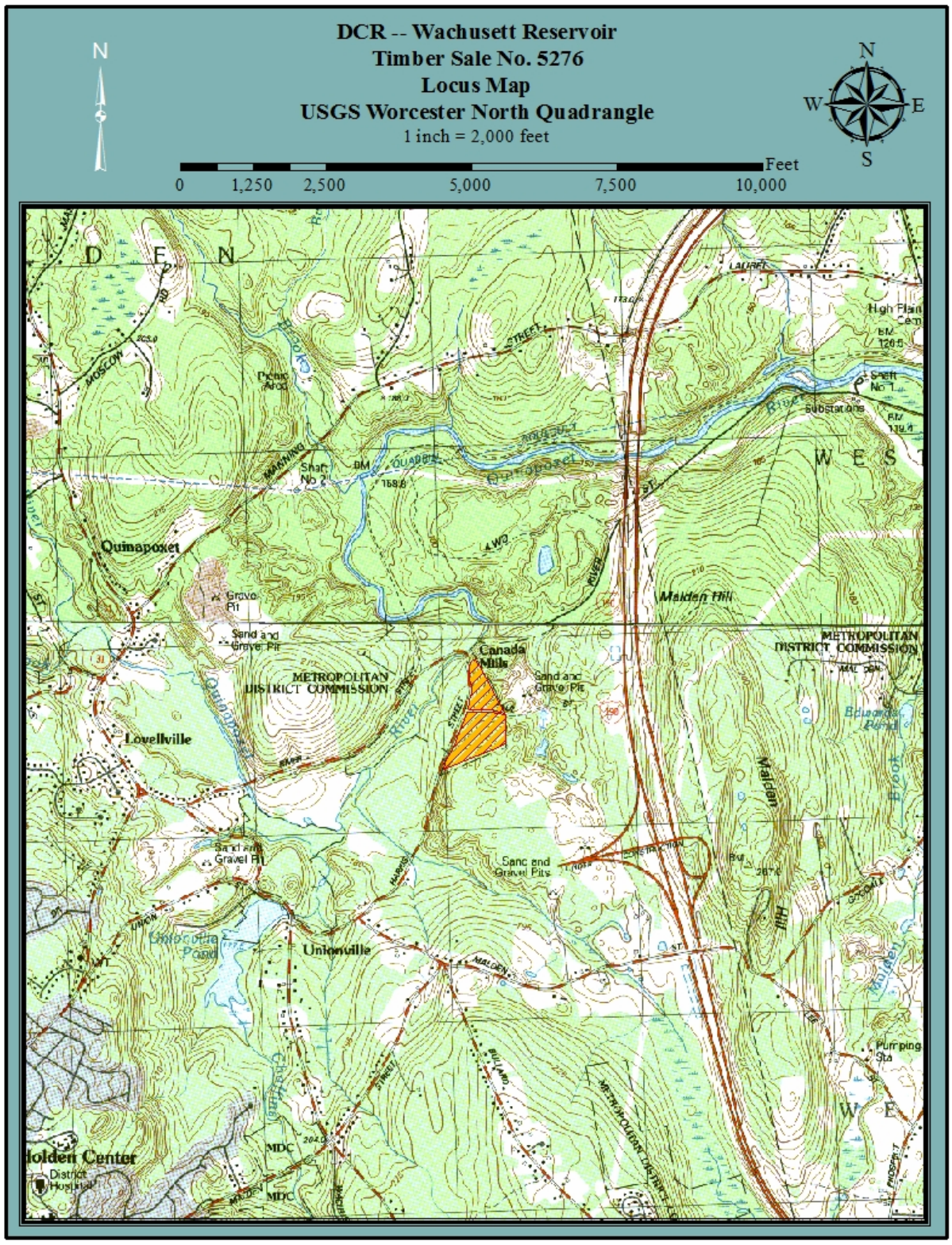

Figure 4. Pre-Harvest Photographs, A-B

A. The landing is located just inside Gate H6 on the left side of Paul Street.

B. One of the areas where the overstory is being removed to give this excellent understory of young hardwood trees the space and light it needs to continue to grow.

Figure 5. Post-Harvest Photographs, A-B

A. An overstory removal area where there is an excellent mixed hardwood and white pine understory which is now free to grow.

B. The black cherry tree to the right was retained to provide structural diversity as well as a continuing source of black cherry seeds into the future.