

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

Project Title: Lot 5276

DWSP Harvest Permit Number: 5276

DWSP Proposal ID: WA-18-25

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

Area of Critical Environmental Concern (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

Harvest Start Date: 9/21/2018

Harvest End Date: 12/04/2020

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 number: 025

Phone number: 774-261-1841

Email: greg.buzzell@mass.gov

Narrative

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

There are no cultural resources.

Rare or Endangered Species

This area falls with a NHESP Priority Habitat for Rare Species for the Wood Turtle which are associated with the Quinapoxet River. As a result, this lot can only be worked between November 15th and March 15th of any given year in order to the accidentally crushing of turtles by logging equipment.

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-B
- Figure 5. Post-Harvest Photographs, A-B

Figure 1. Forest Cutting Plan

Forest Cutting Plan		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
and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00 (Effective Date: 1/1/04)		181-00019	181-00019	8/1/04	YES	WACHUSSETT	WACHUSSETT	LT	NO		
<i>ALB AREA</i>											
Site Information		Location				Landowner					
		Town	Holden	Lot 5276	Name	DCR/DWSP/OWM Wachusett/Sudbury					
Road	Harris Street		Mailing Address	180 Beaman St.							
Acres	21	Proposed Start Date	9/10/18					Town, State, Zip	West Boylston, MA 01583		
Vol. MBF	65.5	Vol. Cds.	63	Vol. Tons	8	Phone	608-792-7806				
Plan Preparer		Ch61	<input type="checkbox"/>	Ch61A	<input type="checkbox"/>	Stew	<input type="checkbox"/>	*Case #			
Name		Russell Wilmot				Est. Stumpage Value					
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											
Best Management Practices		Stream Crossings				Harvesting in Wetlands					
		Indicate location on map	SC-1	SC-2	SC-3	SC-4	Indicate location on map	HW-1	HW-2	HW-3	HW-4
Type of Crossing					Forest Type (see pg 2)						
Existing Structure					Acres to be Harvested						
Type of Bottom					Resid. Basal Area (>50%)						
Bank Height (ft)											
Stabilization											
Codes		Wetland Crossings				Service Forester Comments					
		Indicate location on map	WC-1	WC-2	WC-3	WC-4	<p><i>*ALL SKID ROADSTRIPS ARE EXISTING</i></p> <p><i>* SEE ATTACHED NHESP LETTER FOR SETBACKS</i></p> <p><i>* OPERATION OF MOTORIZED VEHICLES</i></p> <p><i>SITE-WIDE SHOULD BE CONDUCTED ONLY DURING THE TIME PERIOD BEGINNING NOVEMBER 15</i></p> <p><i>TO MARCH 15.</i></p> <p><i>LICENSED TIMBER HARVESTER MUST BE IN ALB COMPLIANCE</i></p>				
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	Note:						
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge	Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin.						
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits.						
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Consult MA Forestry BMP Manual for further information.						
LO Landowner	PO Poled	ST Stone		GR Gravel							
OT Other	OT Other	HB Hay Bales		OT Other							
		OT Other									

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

pg 3 of 5

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.

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 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.



3-22-15

Signature of landowner(s)

Date

Determination and Status

	Approved	Disapproved	Expires
Cutting Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8-23-2020
Signature of Service Forester/Director's Agent			8-27-2016
Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires / /
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	HK	Hemlock	OM	Mixed Oak	CT	Cut Tree	SH	Shelterwood	Intermediate Harvests:	Source of Regeneration
WP White Pine	HK	Hemlock	OM	Mixed Oak	CT	Cut Tree	SH	Shelterwood	Advanced	
WK WP/Hem	HH	Hem/Hdwd	RM	Red Maple	LT	Leave Tree	ST	Seed Tree	Commercial Thin	Natural Seed
WH WP/Hdwd	BC	Bick Cherry	BE	Beech	SB	Stand Boundary	CC	Clear Cut	Non Com Thin	Plant
WO WP/Oak	BB	Bee/Bir/Map	SF	Spruce/Fir	OT	Other	SE	Selection	Non-Standard Systems: [*]	Coppice
RP Red Pine	OH	Oak/Hdwd	SM	Sugar Maple	Landowner Objective	SA Salvage	SA	Highgrade*	CO	Direct Seed
SP Red Spruce	OR	N Red Oak	PP	Pitch Pine	LT	Long-term Mgt.	SN Sanitation	DL Diameter Limit*	DS	
					ST	Short-term Har.	OT	Other*	OT	Other

*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

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: _____

B M P s

Silviculture

Objectives

Other

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

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.

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.

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

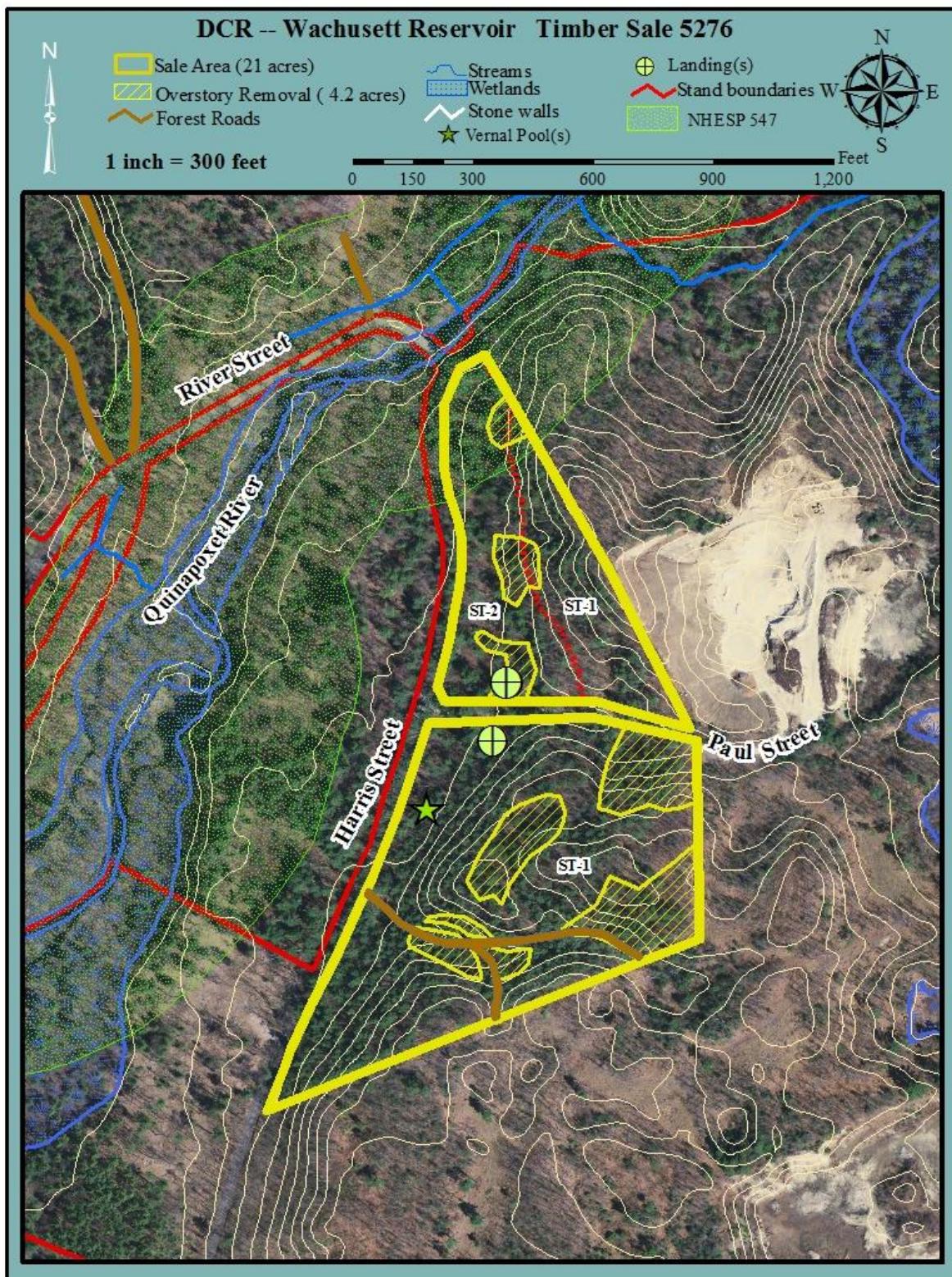


Figure 3. General locus map showing the location of the proposed timber harvest

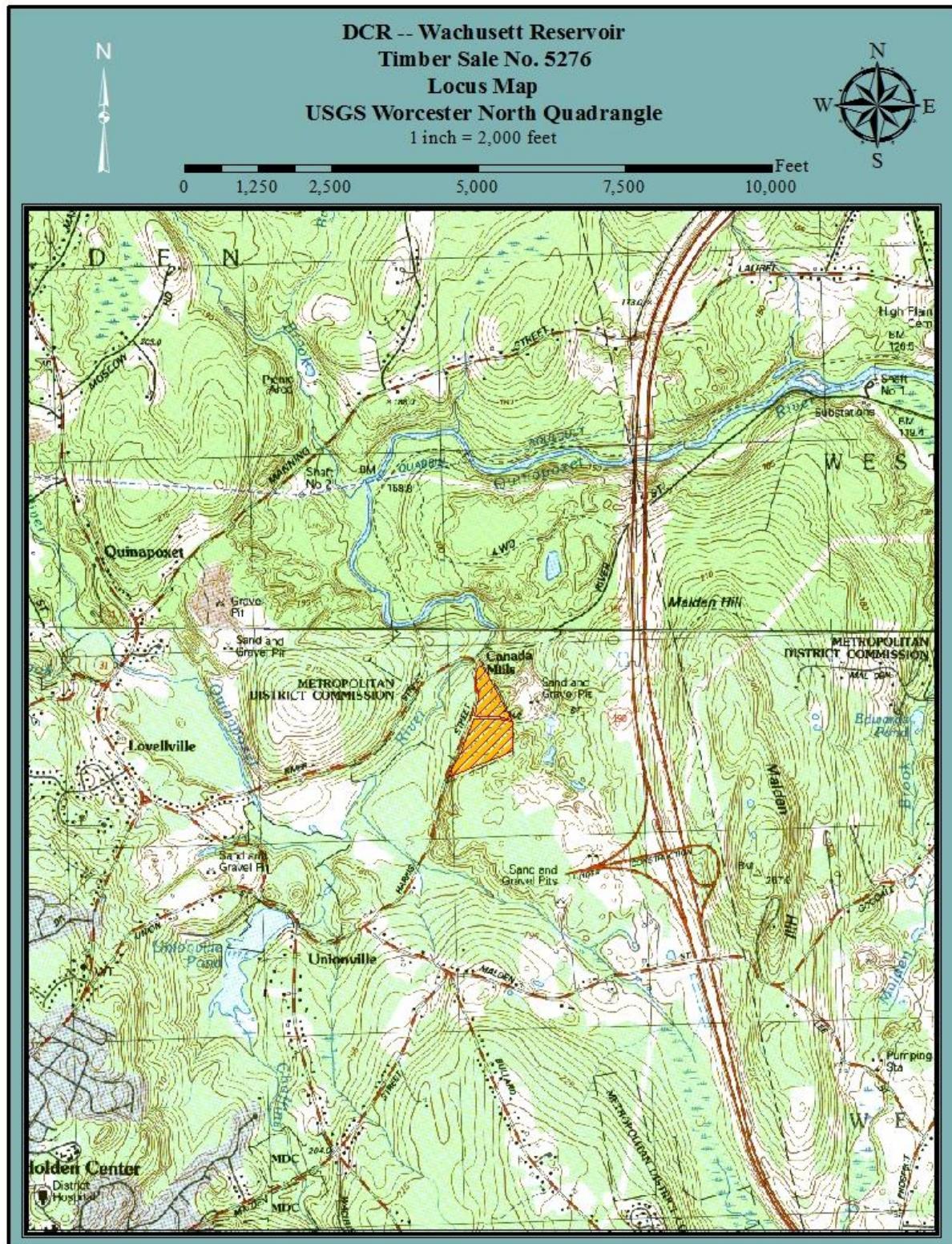


Figure 4. Pre-Harvest Photographs, A-B



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.