

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

**Project Title: Lot 5266**

DWSP Harvest Permit Number: 5266

DWSP Proposal ID: WA-17-136

DCR Forest Cutting Plan File Number: 321-8692-17

***Site Information***

Watershed: Wachusett

Town(s): West Boylston

Acres: 29

Nearest Road: River Road

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: Northern red oak, white pine/oak

Area of Critical Environmental Concern (ACEC)?: No

Soils: Merrimac fine sandy loam, Canton fine sandy loam

Wetland Resources: There are no wetlands within the sale area.

Vernal Pools: None known.

***Harvest Information***

Harvest Start Date: 4/12/2017

Harvest End Date: 6/28/2019

Number of Wetland Crossings: None

Number of Stream Crossings: None

***Best Management Practices Applied***

Stream Crossings: There are no stream crossings.

Filter Strips: No trees are marked in the filter strip.

Wetland Crossings: There are no wetland crossings.

Harvesting in Wetlands: No harvesting in wetlands will occur.

***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***

Red oak and white pine are the two dominant species in this working unit along with far less amounts of white oak and red maple. A few hemlock can be found in the far south end on the steep slope near the stream and in the far northwest corner on the steep north-facing slope above River Road. There's a small pocket of very large red oak, sugar maple and white ash in the rather large borrow-pit just inside the Gate WB25 at River Road.

Two prior timber sales have taken place in this working unit. One sale in 1979 took place on just a few acres in the farthest northwest corner of this area. This sale focused on cutting oak with the goal of establishing oak regeneration. Unfortunately, this is now where mountain laurel forms a very thick understory. The vast majority of this area, especially the steeply sloped, kettle-hole riddled eastern portion, has received no prior treatment nor suffered significant natural disturbance. The result is a lack of advance regeneration with witch-hazel the primary understory plant. The red oaks in this area are large, single-stemmed and of good quality especially on the lower slopes. The white pines in this section are also of good quality with many reaching 110 feet in height. There's also the scattered beech colony.

The red oak in the northern section of this area, are generally smaller in diameter and are multi-stemmed. Given the long-time presence of an MDC labor yard right across River Road at Shaft 1, it is likely that firewood harvesting occurred in this area throughout the past. The small openings in the overstory in this area are occupied by saplings of black birch and red maple along with eastern hophornbeam and striped maple.

### ***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 selected for management because of the lack of age diversity both in these 29 acres as well as the 2,112 acres that the DCR owns that flows into the Quinapoxet River.

### ***Silvicultural Objectives***

The primary objective of this operation will be to begin the establishment of a young forest beneath this otherwise even-aged forest. Both white pine and red oak do very well on this site and so a mix of oak and pine regeneration will be the goal. Stocking will be reduced to variable levels throughout the area with the greatest decreases needing to occur in the red oak dominated stands in order to get red oak established rather than merely encouraging the further dominance of the witch-hazel understory.

### ***Cultural Resources***

There are no known significant historic or archaeological resources in this sale area. The area around the Myron W. Houghton house, barn and well, on the top of the slope inside Gate WB25 will be flagged in order to prevent damage from logging equipment.

### ***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.

### **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

and Notice of Intent under M.G.L.  
Chapter 132 – The Forest Cutting  
Practices Act, 304 CMR 11.00  
(Effective Date: 1/1/04)

MAR 03 2017

For DCR Use Only:	
File Number	321-8692-17 Case No.
Date Rec'd	3/3/17 Nat. Hert. YES 1
Earliest Start	3/12/17 Nat. Hert. Imp. NO
River Basin	NASHUA Pub. Dr. Wat. YES WACHUSETT
Gen. Obj.	LT ACEC NO

Site Information	<b>Location</b>	<b>Landowner</b>
	Town <u>West Boylston</u> Lot <u>5266</u>	Name <u>DCR/DWSP/OWM Wachusett/Sudbury</u>
	Road <u>River Road</u>	Mailing Address <u>180 Beaman St.</u>
	Acres <u>29</u> Proposed Start Date <u>4/17</u>	Town, State, Zip <u>West Boylston, MA 01583</u>
	Vol. MBF <u>62.1</u> Vol. Cds. <u>149</u> Vol. Tons <u>39</u>	Phone <u>608-792-7806</u>
	<b>Plan Preparer</b>	Ch61 <input type="checkbox"/> Ch61A <input type="checkbox"/> Stew <input type="checkbox"/> *Case # _____
	Name <u>Gregory S. Buzzell</u>	Est. Stumpage Value _____
	Address <u>180 Beaman Rd.</u>	<b>Licensed Timber Harvester**</b>
	Town, State, Zip <u>West Boylston, MA, 01583</u>	Name <u>To be supplied when known.</u>
	Phone <u>508-792-7806 Ext 317</u>	Address _____
Type of Preparer <u>Mass. Licensed Forester</u>	Town, State, Zip _____	
*Mass. Forester License # <u>25</u>	Phone _____	
*Required for land under Ch61, Ch61A or Forest Stewardship	Mass. Lic. Harvester # _____	
	**This information may be supplied after the plan is approved, but before work begins.	

Best Management Practices	<b>Stream Crossings</b>	<b>Harvesting in Wetlands</b>		
	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			
	<b>Wetland Crossings</b>		<b>Service Forester Comments</b>	
	Indicate location on map	WC-1 WC-2 WC-3 WC-4	* ALL SLID ROADS/TRAILS ARE EXISTING	
	Length of Crossing		* PLEASE SEE ATTACHED MHESP LETTER (NO IMPACT)	
Mitigation		* PLAN REVIEWED UNDER PRACTICAL SNOW CONDITIONS		
Stabilization				
<b>Filter Strips</b>				
Indicate location on map	FS-1 FS-2 FS-3 FS-4			
Width (50', 100', or VA)	VA			
		* AMENDMENT -> LANDING ADDED		

Codes	<b>Type of Preparer</b>	<b>Type of Crossing</b>	<b>Stabilization</b>	<b>Mitigation</b>	<b>Type of Bottom</b>	<b>Note:</b>
	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			

Forest Products

Products to be Harvested\*

Table with 4 columns: Species, Mbf/Cds, (blank), Mbf/Cds. Rows include White Pine, Red Pine, Pitch Pine, Hemlock, Spruce, Other Sftwd, White Ash, Beech, White Birch, B & Y Birch, Black Cherry.

\*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

Table with 5 columns: Indicate location on map, ST-1, ST-2, ST-3, ST-4. Rows include Forest Type, Acres, Landowner Objective, Designation of Trees, Type of Cut, Source of Regeneration.

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.

[X] 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.

Handwritten signature of landowner(s)

Handwritten date 2/2/17

Service Forester

Determination and Status

Form with checkboxes for Approved, Disapproved, Expires, Extension, Amendment, and handwritten dates like 3-3-2019 and 4-3-17.

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

Table with 7 columns: Forest Types, Designation of Trees, Type of Cut, Intermediate Harvests, Source of Regeneration. Rows include WP, WK, WH, WO, RP, SR, HK, HH, BC, BB, OH, OR, OM, RM, BE, SF, SM, PP, Mixed Oak, Red Maple, Beech, Spruce/Fir, Sugar Maple, Pitch Pine, Cut Tree, Leave Tree, Stand Boundary, Other, Long-term Mgt., Short-term Har., Shelterwood, Seed Tree, Clear Cut, Selection, Salvage, Sanitation, Commercial Thin, Non Com Thin, Non-Standard Systems, Highgrade, Diameter Limit, Other, Advanced, Natural Seed, Plant, Coppice, Direct Seed, 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

Landowner: DRE/DUSE/OWIM

Town: West Boylston

File Number: 321-8692-17

Use only if further explanation is required of information on pages one or two or if "other" was used in any category.

<b>BMPs</b>	<u>There are no stream or wetland crossings in this lot.</u>
<b>Silviculture</b>	
<b>Objectives</b>	<u>The main objective of this operation is to begin the establishment of a new cohort in this even-aged forest by encouraging the establishment of an understory of seedlings. In the long run, this will allow us to diversify the age structure of the forest by one day removing portions of the overstory.</u>
<b>Other</b>	<u>The haul trail has not been flagged. As this lot will be open to both skidders and forwarders, adjustments to the road may occur after the bid is awarded.</u>

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

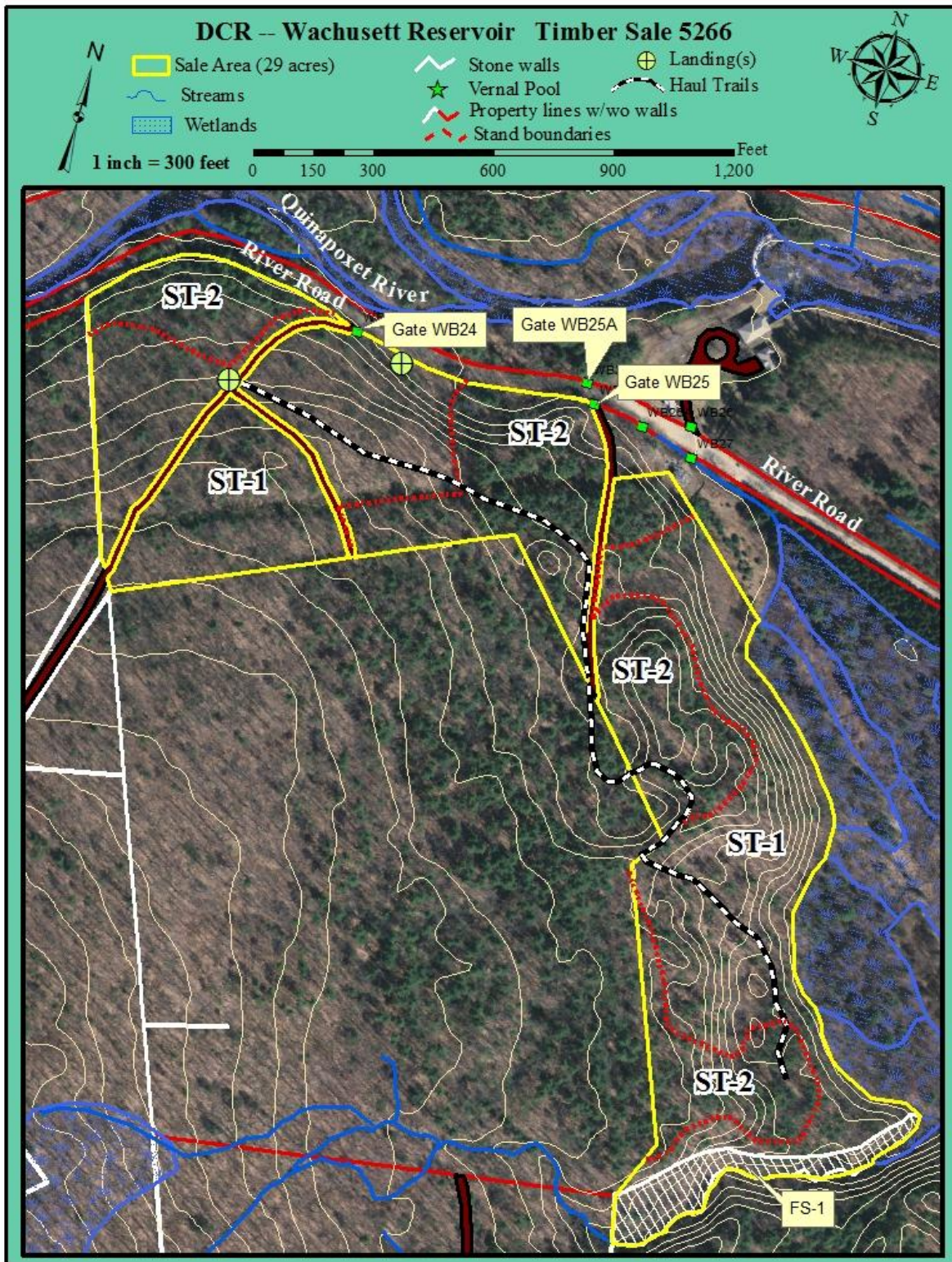
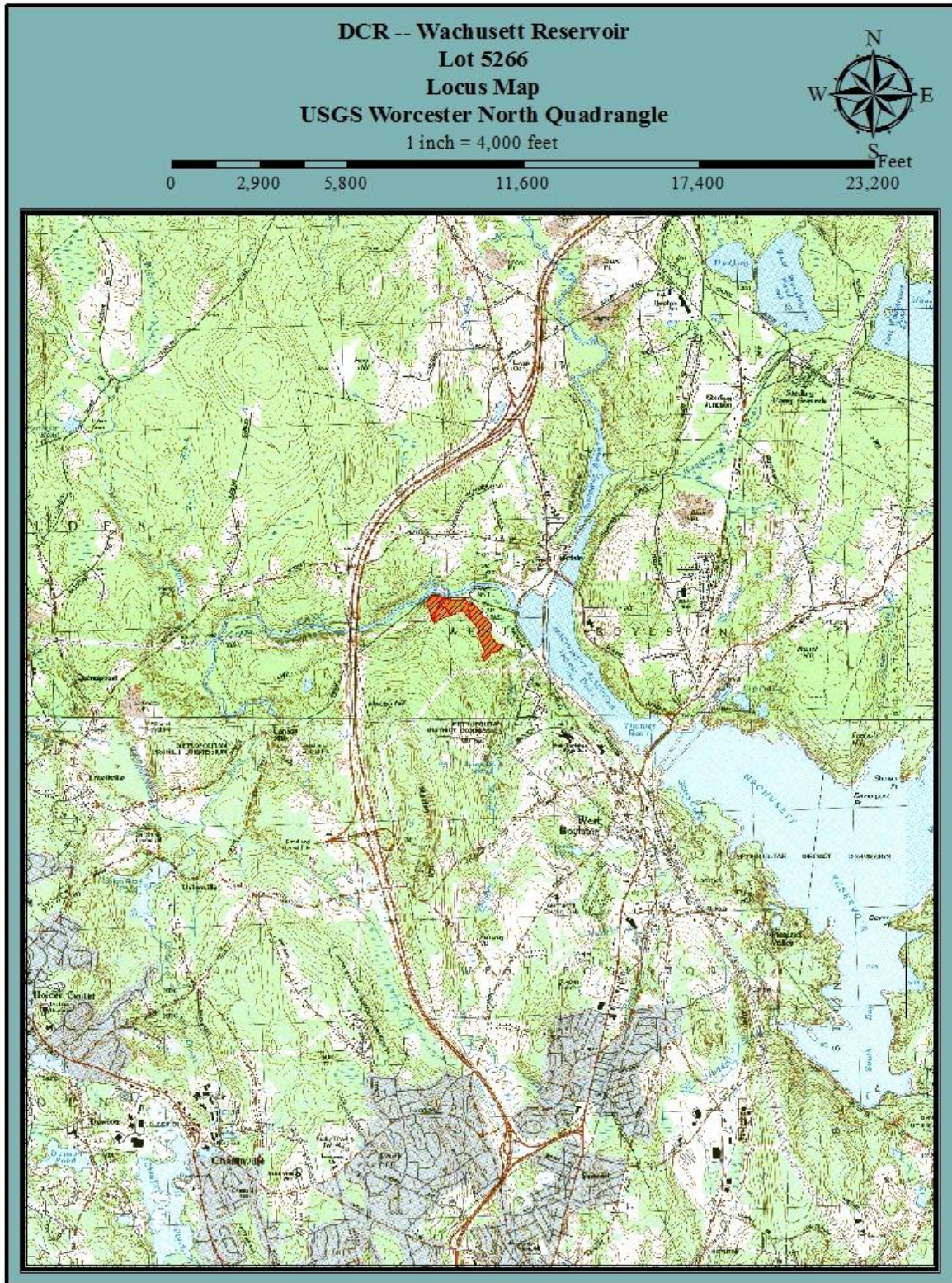


Figure 3. General locus map showing the location of the proposed timber harvest



**Figure 4. Pre-Harvest Photographs, A-B**



**A. The landing on River Road. Gate WB24 can be seen to the right.**



**B. Removing a portion of the overstory and damaging this mountain laurel and witch-hazel understory should allow oak and pine regeneration to become established.**

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



A. Partial cutting leaving most of the white pines with the goal of encouraging white pine regeneration.



B. Partial cutting in an area of primarily red oaks with white pine nearby.