

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

**Project Title**

<b>DWSP Harvest Permit Number:</b> 1044
<b>DCR Forest Cutting Plan File Number:</b> 124-6862-14

**Site Information**

<b>Watershed:</b> Quabbin	<b>Town(s):</b> Hardwick
<b>Acres:</b> 33	<b>Nearest Road:</b> Lyman Road
<b>Natural Heritage Atlas overlap?:</b> No	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> Mixed oak	<b>ACEC?:</b> No
<b>Soils:</b> Charlton- Chatfield-Hollis assoc. and Montauk-Scituate-Canton assoc, well drained gravelly, sandy loams.	
<b>Wetland Resources:</b> None	
<b>Vernal Pools:</b> None	

**Harvest Information**

<b>DWSP Permit Start Date:</b> 4/1/2014	<b>DWSP Permit End Date:</b> 7/1/2016
<b>Number of Wetland Crossings:</b> None	<b>Number of Stream Crossings:</b> None

**Best Management Practices Applied**

<b>Stream Crossings</b>	There are no stream crossings.
<b>Filter Strips</b>	There are no filter strips.
<b>Wetland Crossings</b>	There are no wetland crossings.
<b>Harvesting in Wetlands</b>	There is no harvesting in wetlands.

**DWSP Forester supervising this harvest**

<b>Name:</b> Randy Stone
<b>Forester License #:</b> 229
<b>Phone #:</b> 413-323-6921x156

## **NARRATIVES**

### **General Description/Forest Composition/History**

The lot is located on Lyman Rd. in the town of Hardwick. The forest on the lot originated following pasture abandonment early in the 20th century, and no forest management has taken place on the lot since the general taking.

The lot is a dry-site mixed-oak stand with an average diameter of about 7." The principal species are white, red, black and scarlet oak with associates of red maple, black birch, and white pine. The understory consists of low bush blueberry and huckleberry, with chestnut, red maple, and serviceberry seedlings.

Soils are the Charlton-Chatfield-Hollis association, and the Montauk-Scituate-Canton association, well drained to excessively drained gravelly or sandy loams derived from glacial till. In some areas of the lot there is exposed bedrock.

### **Site Selection**

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. In order to achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large legacy trees). In addition, the forest should be vigorous; actively growing and regenerating. Forest in this condition is suited to be resilient to and quickly recover from small and large scale disturbances such as disease, insect infestation, ice storms and hurricanes.

The lot was selected on the basis of meeting the Quabbin Land Management Plan silvicultural objective to conduct intermediate thinning where necessary to increase group or stand vigor. The fully stocked stand of mixed-oak on the lot contains many trees of low vigor and slow growth that will benefit from extra growing space as a result of thinning.

### **Silvicultural Objectives**

The silvicultural treatment will be an intermediate thinning to give extra growing space to the residual trees by removing poor quality and suppressed individuals. This treatment will cover the entire 33 acre lot. The desired future condition of the lot is a more vigorous forest of well-spaced trees of highest relative quality.

### **Cultural Resources**

Stone walls are present along the road and along the west lot boundary, and there are discontinuous walls along the fireline. There are also interior walls with existing barways for forest transit access. A cellar hole on the lot has been excluded from the work area. This project has been reviewed by the DCR archaeologist.

**Wildlife/Rare or Endangered Species Resources Comments:**

The lot area contains no vernal pools, critical habitats, or known rare or endangered species.

**FIGURES**

1. Approved Forest Cutting Plan
2. Pre-Harvest Photograph
3. Post-Harvest Photographs

Figure 1. Approved 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 3 2014

**For DCR Use Only:**

File Number 124-6862-14 Case No.                       
 Date Rec'd 1-31-14 Nat. Hert.                       
 Earliest Start 2-18-14 Nat. Hert. Imp.                       
 River Basin CHOICE Pub. Dr. Wat. OV-K13131  
 Gen. Obj. LT ACEC                     

Site Information

**Location**

Town Hardwick Quabbin Lot # 1044  
 Road Gate 45 Lyman Road  
 Acres 33 Proposed Start Date 4/14  
 Vol. MBF                      Vol. Cds. 356 Vol. Tons 1

**Plan Preparer**

Name Randy Stone, DCR-DWSP Forester  
 Address 485 Ware Rd.  
 Town, State, Zip Belchertown, MA 01007  
 Phone 413-323-6921 x 156  
 Type of Preparer Mass. Licensed Forester  
 \*Mass. Forester License # 229  
 \*Required for land under Ch61, Ch61A or Forest Stewardship

**Landowner**

Name DCR Division of Watershed Supply Protection  
 Mailing Address 485 Ware Rd.  
 Town, State, Zip Belchertown, MA 01007  
 Phone 413-323-6921  
 Ch61  Ch61A  Stew  \*Case #                       
 Est. Stumpage Value                     

**Licensed Timber Harvester\*\***

Name                       
 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)	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**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Codes

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. Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.
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			

Forest Products

**Products to be Harvested\***

Species	Mbf/Cds		Mbf/Cds
White Pine		Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	
Hemlock		Black Oak	
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		<b>Total Mbf</b>	
Beech		<b>Cordwood (Cds)</b>	356
White Birch		<b>SW Pulp (Tons)</b>	1
B & Y Birch		<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

\*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	OM			
Acres	33			
Landowner Objective	LT			
Designation of Trees	CT			
Type of Cut	CT			
Source of Regeneration	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 (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.

*William E. Puda*  
 Signature of landowner(s)

1-30-14  
 Date

Service Forester

**Determination and Status**

124-6862-14

Approved  Disapproved  Expires 2-1-2016

Cutting Plan  *Donna M. Hatcher* 2/27/14  
 Signature of Service Forester/Director's Agent Date

*Site visit w/ RANDY STONE* 2/26/14  
 Expires Ser. For. Ints. 1

Extension  1  2  3

Amendment App 1  Dis 1  App 2  Dis 2

**Final Report and Comments**

I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.

*[Signature]* 7/22/2014  
 Signature of Service Forester/Director's Agent Date

Codes

<b>Forest Types</b>	<b>Designation of Trees</b>	<b>Type of Cut</b>	<b>Intermediate Harvests:</b>	<b>Source of Regeneration</b>
WP White Pine	CT Cut Tree	SH Shelterwood	AD Advanced	SE Natural Seed
WK WP/Hem	LT Leave Tree	ST Seed Tree	CT Commercial Thin	PL Plant
WFI WP/Hdwd	SB Stand Boundary	CC Clear Cut	NT Non Com Thin	CO Coppice
WO WP/Oak	OT Other	SE Selection	<b>Non-Standard Systems*:</b>	DS Direct Seed
RP Red Pine	<b>Landowner Objective</b>	SA Salvage	HG Highgrade*	DL Diameter Limit*
SR Red Spruce	LT Long-term Mgt.	SN Sanitation	OT Other*	OT Other
	ST Short-term Har.			

# Forest Cutting Plan

Narrative Page (Effective Date: 1/1/04)

Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4.

Landowner DCR-Quabbin

Town Hardwick

File Number 124-6862-14

**BMPS**

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

Note to Service Forester: This cut is a commercial thinning in an overstocked mixed oak stand. The harvest will lower the basal area to the B-line or below by removing suppressed and low quality stems and reserving better quality trees.

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**Designation of Trees**

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4.

Stand No.	Species to be Cut	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Removed
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**Future Condition**

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Stand No. \_\_\_\_\_ Desired Future Condition \_\_\_\_\_  
Describe what the stand is expected to look like five years from the harvest including the condition of the overstory & understory

DCR Division of Water Supply Protection - Quabbin Section  
Volume Summary Sheet

Lot #: 1044  
Acres: 33.0

*Summary of Cordwood (not including Hardwood sawlog topwood)*

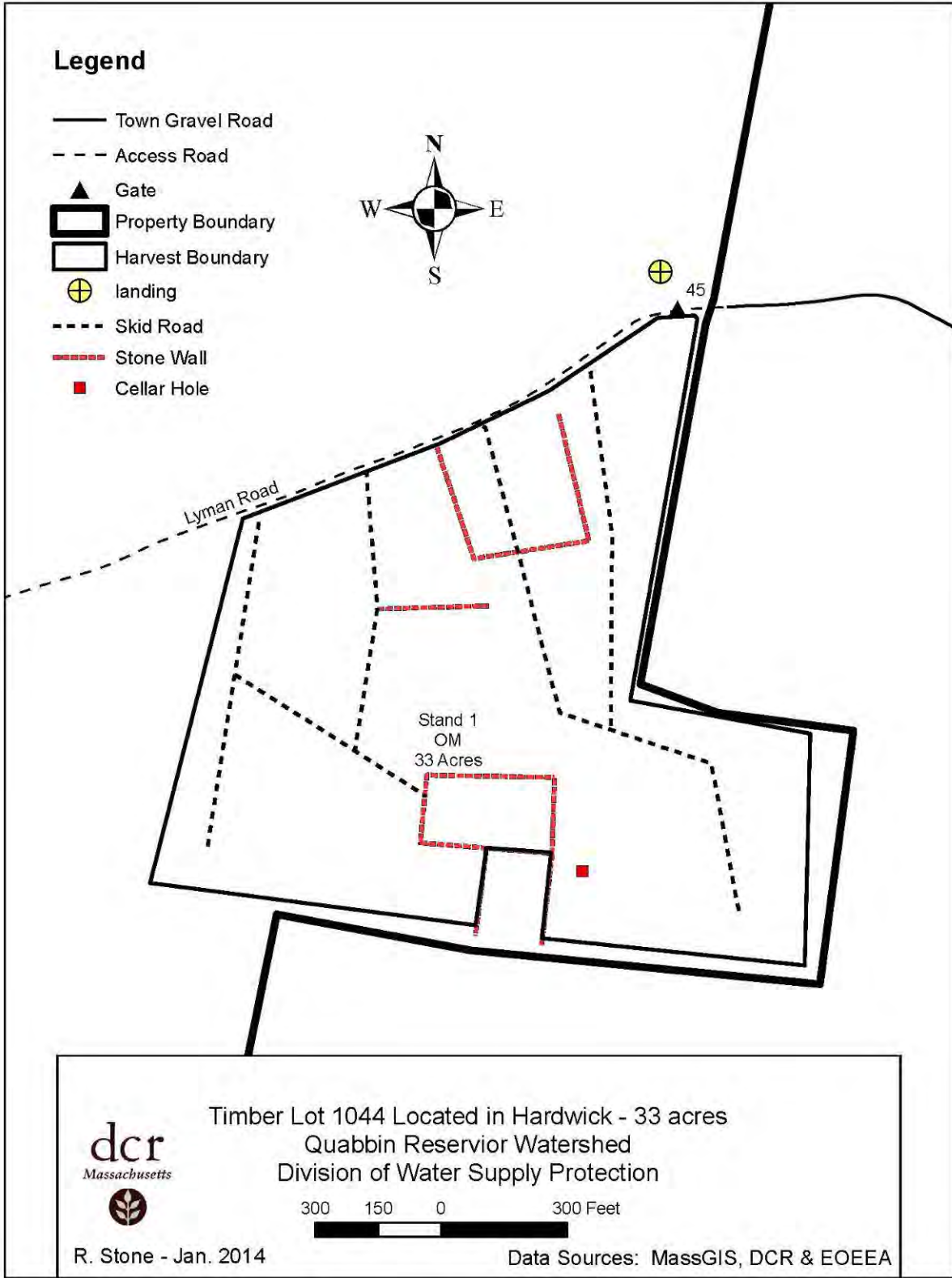
Species Name	Total Cords	Total # Trees	Avg DBH	Trees/Cord	Cords/Acre	BA/acre
Mixed Hardwood	356	3225	8.1	9.1	10.8	37.2
<b>Totals:</b>	356	3225	8.1	9.1	10.8	37.2

*Summary of Pulpwood (not including Softwood sawlog topwood)*

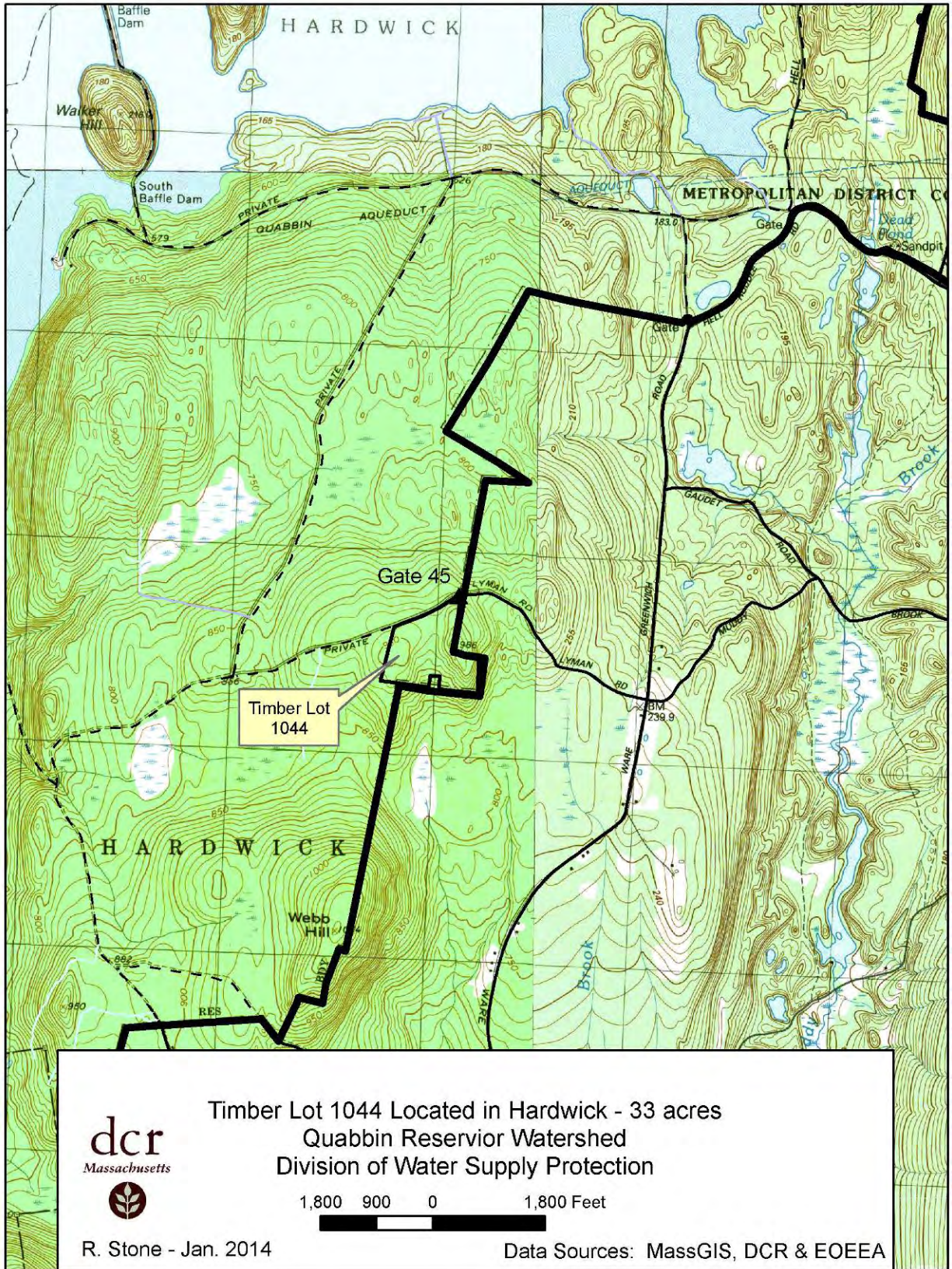
Species Name	Total cords	(tons)	Total # Trees	avgdbh	Cords/acre	BA/acre)
White Pine	1	1	9	8.6	0	0.1
<b>Totals:</b>	1	1	9	8.6	0	0.1

*Summary of Silviculture*

Total trees removed, all products, all species	3234
Trees/acre removed, all products, all species	98
Total BA removed, all products, all species (sq. ft.)	1230
Total BA/acre removed, all products, all species (sq. ft./acre)	37
Average DBH for the lot (inches)	8.1







DCR



COMMONWEALTH OF MASSACHUSETTS  
Department of Conservation and Recreation  
Division of State Parks and Recreation

FILE # 1274-6862-14

# FOREST CUTTING PLAN CERTIFICATE

Post this in a conspicuous place within the area in which the harvesting operation is to take place.

This certifies that DCR DWSPA Belcher town in accordance with the  
(Name of Owner) (Address)

provision of M.G.L. Chapter 132, Section 40-46, filed in Clinton with the Dept. of Conservation  
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the  
Harwich Pt. Quabbin Lot # 1044.

Approval Date 2-27-14 ISSUED BY: Priscilla E. Geigis

Director's Agent Doug Hatcher

DCR Phone No. 413-545-7020

Priscilla E. Geigis, Director  
Division of State Parks and Recreation

**Figure 2. Pre-Harvest Photograph**



**Figure 3. Post-Harvest Photographs**

