

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

**Project Title:** Shutesbury Slash wall  
DWSP Harvest Permit Number: 2061  
DWSP Proposal ID: PE-25-14  
DCR Forest Cutting Plan File Number: 272-43673-26

***Site Information***

Watershed: Quabbin  
Town(s): Shutesbury  
Acres: 67.5  
Nearest Road: Prescott Road  
Natural Heritage Atlas overlap?: No  
Public Drinking Water Supply Watershed?: Yes  
Forest Types: white pine/oak, white pine, and black birch/hardwood  
Area of Critical Environmental Concern (ACEC)?: No  
Soils: Canton-Chatfield-Hollis complex, Montauk fine sandy loam, Scituate fine sandy loam  
Wetland Resources: The harvest area is adjacent to several wetlands but only contains one. While harvesting will not occur within the wetland there is one wetland crossing.  
Vernal Pools: none known

***Harvest Information***

Harvest Start Date: TBD  
Harvest End Date: TBD  
Number of Wetland Crossings: one  
Number of Stream Crossings: none

***Best Management Practices Applied***

Stream Crossings: no crossings  
Filter Strips: two variable width filter strips, no harvesting is planned in the filter strips.  
Wetland Crossings: crossing is required to be bridged while in use with corduroy on the approaches.  
Harvesting in Wetlands: none

***DWSP Forester supervising this harvest***

Name: Richard Graham MacLean  
Forester License number: 467  
Phone number: 857-263-0211  
Email: [richard.maclean@mass.gov](mailto:richard.maclean@mass.gov)

## **Narrative**

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

Stand One is a 24.9-acre upland eastern white pine oak stand. The stand is dominated by eastern white pine. The oak is primarily northern red oak with some black oak, white oak, and a little scarlet oak. There is also canopy red maple and a few individual hemlock, black gum, and yellow birch. The stand is mostly in medium to large saw log size overstory with a closed canopy.

A majority of the understory has little to no tree regeneration. The southern section has more than an acre of dense mountain laurel growth. A half-acre of which is greater than ten feet tall. DWSP staff have already cut the mountain laurel where it enters the slash wall clear cut. The logger will be instructed to damage regrowing mountain laurel during the harvest. The very north end has a strip of striped maple saplings, all badly browsed.

Stand Two is a 21.7 acre eastern white pine oak stand. This stand is dominated by northern red oak, with eastern white pine secondary. The stand also contains black and white oak, as well as red maple and black birch in the overstory. The stand is primarily medium sized sawlogs with little understory vegetation. Stand Two sits on the eastern facing slopes of the hill and is better drained than Stand One.

Stand Three is a younger black birch dominated stand. The northern section of the stand established after a red pine removal in 2000. The trees are just below pole sized and dominated by black birch. There are scattered red maple, and few red oak stems. The southern section is also black birch dominated with red maple but no oak. It likely established after browser delayed regeneration from a 1976 harvest. This southern section is wetter and slopes into an intermittent stream to the east. It transitions into a wooded wetland to the south where it meets Cobb Brook.

Stand Four is a dense eastern white pine stand. This three-acre stand is dominated by medium to large sawlog sized eastern white pine. There are scattered individual suppressed red maples. Near the edges of the stand there are scattered black birch saplings. Otherwise, the stand has little tree regeneration.

### ***Site Selection***

This site was selected for a combination of three factors. The first is its limited established regeneration. The second is the low diversity of what regeneration is present. And the third is the extensive evidence of browse damage. The browse damage shows likely browse by both deer and moose (browse damage beyond the height of deer). These combination of factors made this site a good candidate for testing a slash wall at the Quabbin Reservoir.

Slash walls are barriers constructed from the tops of harvested trees (slash). These walls are built during a harvest by the logger. The walls help prevent browsing of newly growing trees by moose and deer. They have several advantages over traditional fencing. Slash walls are more durable than fencing, a falling limb only adds to the material in a slash wall. Traditional fencing can be completely compromised by one downed limb. Slash walls decompose over time leaving nothing to clean up.

[The slash wall technique was pioneered by researchers at Cornell.](#) It has since been tested further by a Southern New England research collaborative. [This collaboration included the building of a slash wall on DWSP land in Oakham.](#) [This work has promising early results.](#) [Recently, Mount Grace Land Trust also built a slash wall on its protected lands.](#)

This site will host one of several slash wall tests that are to be built at Quabbin in the next several years. The soils, history, and vegetation communities differ between Quabbin and Ware River. There are similar differences across the more than fifty thousand acres at Quabbin. Those differences make it important to test the technique in multiple places.

### ***Silvicultural Objectives***

DWSP is working long term to diversify the age structure of the forest it protects. At the same time, it is working to maintain or increase the species diversity of that forest. Diversifying the age structure of the forest will help improve resiliency to disturbance. Having a distribution of younger trees helps ensure forest continuity. A forest of diverse species is more resilient to species specific pests and disease.

This harvest will help create the conditions for new cohorts of trees to establish and grow. In Stand One this harvest will test a slash wall with two paired four-acre clear cuts with retention. Within the southern clear cut, DWSP Forestry will work with the logger to construct a slash wall. Separating regenerating trees from browsers will likely result in a higher species diversity.

Further group selection openings will be created in Stands One, Two, and Four. These openings will range in size between half- to one-acre. These smaller openings will provide further comparison with the paired four-acre clear cuts. Different species have different shade tolerance. Smaller openings have less diversity of light conditions. This usually preferences shade tolerant trees.

Stand Three will be treated with noncommercial thinning to help reduce black birch dominance. This thinning will also help release retained trees to grow with less competition.

### ***Cultural Resources***

There is a foundation just west of the landing and another east by southeast. There are extensive stone walls in the northern section, and limited scattered stone walls in the remainder. There are two former cart roads with parallel stone walls. One bisects the lot northwest to southeast. The other is at the southern end of the harvest area. Skid roads will take advantage of two areas previously breached. The remainder of the stone walls will be protected during the harvest. Any additional cultural resources found during the harvest will be protected.

### ***Rare or Endangered Species***

None known.

Figures

Figure 1. Forest Cutting Plan

Figure 1a. Forest Cutting Plan page 1.

RECEIVED MAR -1 2026

# Forest Cutting Plan

and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00 (Effective Date: 3/15/16)

**For DCR Use Only:**

File Number 272-43673-26 Case No. NA  
 Date Rec'd 3/12/26 Nat. Hert. NO  
 Earliest Start 3/19/26 Pub. Dr. Wat. YU  
 River Basin Chicopee ACEC IN  
 Gen. Obj. LT

Site Information

**Location**

Town Shutesbury (DCR DWSP Lot 2061)  
 Road Prescott Road  
 Acres 58.7 Proposed Start Date TBD  
 Vol. MBF 161.8 Vol. Cds. 90 Vol. Tons 108

**Plan Preparer**

Name Richard Graham MacLean  
 Address 485 Ware Road  
 Town, State, Zip Belchertown, MA 01007  
 Phone (857) 263-0211  
 Type of Preparer LF  
 \*Mass. Forester License # 467  
 \*Required for land under Ch61, Ch61A or Forest Stewardship

**Landowner**

Name DCR Division of Water Supply Protection  
 Mailing Address 485 Ware Road  
 Town, State, Zip Belchertown, MA 01007  
 Phone \_\_\_\_\_  
 Ch61  61A  61B  Stew  \*Case # \_\_\_\_\_  
 FSC  CR  CR Holder

**Licensed Timber Harvester\*\***

Name TBD  
 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	32			
Mitigation	FR/DR			
Stabilization	CO/BR			

**Filter Strips**

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or VA)	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 Coarsery	OT Other	MU Mud	
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



Figure 1a. Forest Cutting Plan page 3.

Forest Products

### Products to be Harvested\*

Species	Mbf/Cds	Species	Mbf/Cds
White Pine	131.5	Red Maple	1.2
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	21.3
Hemlock		Black Oak	4.8
Spruce		White Oak	
Other Sitwd.		Other Hdwd.	
White Ash		<b>Total Mbf</b>	161.8
Beech		<b>Cordwood (Cds)</b>	90
White Birch		<b>SW Pulp (Tons)</b>	108
B & Y Birch	3	<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

\*Note: Volumes 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	WO	OH	WP
Acres	24.9	21.7	8.5	3.6
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	CT	CT	CT
Type of Cut	CC	SE	NT	SE
Source of Regeneration	SE	SE	SE	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 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.

2/25/2026

Signature of landowner(s) Date

### Determination and Status

Approved    Disapproved    Expires

Cutting Plan            3-2-28

4-8-26

Signature of Service Forester/Director's Agent    Date

Extension    1     2     Expires    Ser. For. Ints.

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 of Service Forester/Director's Agent    Date

Codes

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

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

**Figure 1a. Forest Cutting Plan additional narrative page.**



*The Commonwealth of Massachusetts*  
*Department of Conservation and Recreation*  
485 Ware Road | Belchertown, MA 01007  
www.Mass.gov/DCR | Tel: (413) 323-6921

Maura T. Healey  
*Governor*

Kimberley Driscoll  
*Lieutenant Governor*

Rebecca L. Tepper  
*Secretary*

Nicole LaChapelle  
*Commissioner*

---

Additional narrative for Massachusetts Department of Conservation and Recreation Division of Water Supply Protection (DWSP) Harvest Lot 2061:

The intention of this harvest is to test the use of a slash wall for protecting tree regeneration from ungulate browse after harvest. This technique was pioneered by researchers at Cornell University and has been utilized in Massachusetts by DWSP in Oakham, and by Mount Grace Land Trust in Warwick.

Stand 1 will be treated with three openings 4.9, 4.8, and 0.5 acres in size. These openings are intended to start transitioning the stand from even-aged to un-even aged, similar to group selection. The logger will be directed to build a slash wall within the perimeter of the 4.9 acre opening. The 4.8 acre opening will be left without a wall to serve as a comparison site. The 0.5 acre opening and openings in Stand 2 will serve as smaller unwallied comparison sites. A forwarder will be required for building the wall ten feet tall by approximately twenty feet wide at the base, and approximately 1,700 feet in length.

The slash wall will be built from the pulpwood and cordwood (including topwood) being harvested here. Based on estimates from the Cornell Slash Wall Resource Center (<https://blogs.cornell.edu/slashwall/>) approximately 527 tons of material will be required to construct the wall. The harvest contains an estimated 151 tons of hardwood topwood, 261 tons of softwood topwood, 243 tons of standing cordwood, and 108 tons of standing pulpwood. Pulpwood and cordwood not used to build the slash wall will be available for utilization by the harvester.

The two larger openings both contain 7.1 and 7.2 square feet of internal basal area retention at 2.7 trees per acre. The retention favors northern red, black, and white oak. Internal retention also contains white pine and single individuals of yellow birch, and black gum.

Permanent understory sampling sites will be established prior to harvest. These sites will be sampled at regular intervals again after harvest.



Figure 1a. Forest Cutting Plan stand map

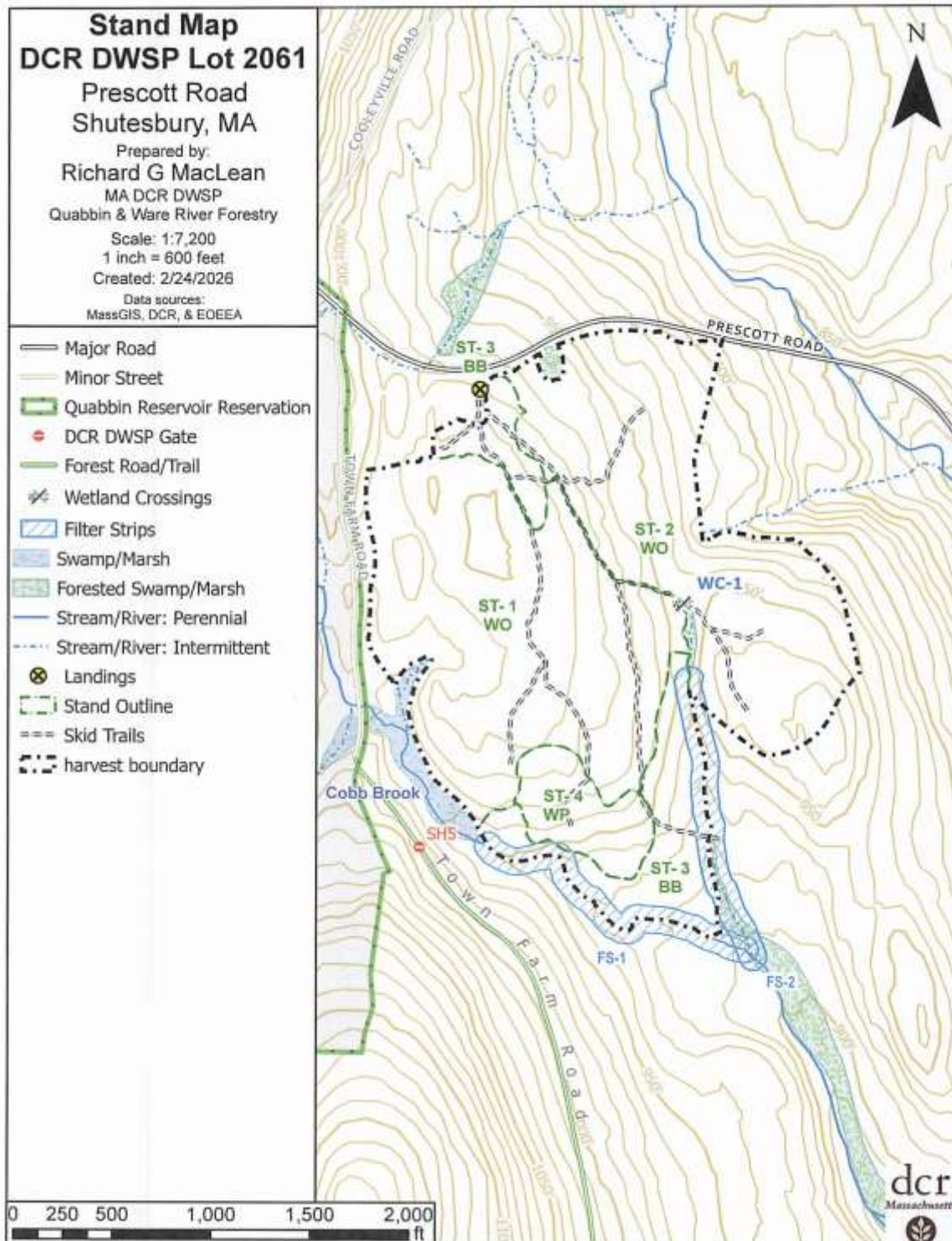




Figure 1a. Forest Cutting Plan certificate.

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

FILE # 272-43673-26

# 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-DWSP 485 Ware Rd  
(Name of Owner) (Address) Belchertown, MA 01007 in accordance with the

provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst F.O. with the Dept. of Conservation and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the

Prescott Rd "2061" lot, Shutesbury

Approval Date 4/8/26  
Director's Agent Andrew Rawcliffe  
DCR Phone No. (617) 549-1677

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