

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

**Project Title: Brown's Hill West Slope**

DWSP Harvest Permit Number: 3147

DWSP Proposal ID: NS-16-23

DCR Forest Cutting Plan File Number: 204-8989-18

***Site Information***

Watershed: Quabbin

Town(s): New Salem

Acres: 46

Nearest Road: Fay Road

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: White Pine, Mixed Oak

Area of Critical Environmental Concern (ACEC)?: No

Soils: Merrimac, Hinckley and Canton fine sandy loam

Wetland Resources: Part of the harvest is bounded by bordering wetland of the Swift River's middle Branch

Vernal Pools: No

***Harvest Information***

Harvest Start Date: September 20, 2017

Harvest End Date: May 30, 2018

Number of Wetland Crossings: None

Number of Stream Crossings: None

***Best Management Practices Applied***

Stream Crossings: None

Filter Strips: two 50-foot filter strips along the Swift River's middle branch bordering wetlands

Wetland Crossings: None

Harvesting in Wetlands: No

***DWSP Forester supervising this harvest***

Name: Derek Beard

Forester License number: 14

Phone number: 617-780-0631

Email: [derek.beard@mass.gov](mailto:derek.beard@mass.gov)

## **Narrative**

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

This watershed forest management project covers 46 acres of the west slope of Brown's Hill in New Salem. Specifically, it's situated south of Fay Road (Gate NS 11). It is bounded to the south by stone wall, west by the middle branch of the Swift River, north by Fay Road and east by Div. of Water Supply boundary.

### ***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. 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 ideally suited to be resilient to and quickly recover from small- and large-scale disturbances such as disease, insect infestation, ice storms and hurricanes. Sufficient advanced regeneration coupled with an underrepresented young forest layer merits some regeneration harvesting.

### ***Silvicultural Objectives***

Diversification of forest structure is the primary project objective. This will be accomplished by creating openings (a.k.a. patches) in the forest canopy. Specifically, this project has 13 openings ranging between 0.25 and 0.9 acres with an average of 0.5 acres. Openings greater than 0.5 acres have retention trees which will add to future forest complexity. There is also a half-acre of thinning along Fay Road.

### ***Cultural Resources***

No significant cultural resources were discovered during the project planning process. This was corroborated by the August 2015 written comments from the state archeologist

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

Maintaining and/or enhancing habitat is a high priority when planning and executing watershed forest management projects. As such, retaining live and dead snags, trees that show sign of use by wildlife for nesting/denning, scenting and foraging is a priority.

The project does overlap with area identified by the MA Natural Heritage Endanger Species program. Their review deemed the project to have no impact on the protected flora and/or fauna.

## Figures

### 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	201-8789-18	Case No.	
Date Rec'd	8/25/17	Nat. Hert.	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
Earliest Start	9/10/17	Nat. Hert. Imp.	<input type="checkbox"/> No
River Basin	Chicopee	Pub. Dr. Wat.	Quabbin
Gen. Obj.	LT	ACFC	<input type="checkbox"/> No

FINAL

Site Information	<b>Location</b> <b>Timber Lot 3147</b>				<b>Landowner</b>				
	Town	New Salem			Name	DCR – Division of Water Supply Protection			
	Road	Pay Road			Mailing Address	485 Ware Rd.			
	Acres	46	Proposed Start Date		Town, State, Zip	Belchertown, MA 01007			
	Vol. MBF	103	Vol. Cds.	68	Phone	412-323-6921			
	Vol. Tons	308			Ch61	<input type="checkbox"/> 61A	<input type="checkbox"/> 61B	<input type="checkbox"/> Stew	
					Case #				
					CR	<input type="checkbox"/> CR Holder			
					<b>Licensed Timber Harvester**</b>				
					Name				
Best Management Practices	<b>Plan Preparer</b>				Address				
	Name	Derek Beard			Town, State, Zip				
	Address	DCR – Div. of Water Supply Protection			Phone				
		21 Elm St.			Mass. Lic. Harvester #				
	Town, State, Zip	New Salem, MA 01355			*Case #				
	Phone	978-544-6343							
	Type of Preparer	LF							
	*Mass. Forester License #	14							
	*Required for land under Ch61, Ch61A or Forest Stewardship							**This information may be supplied after the plan is approved, but before work begins.	
		<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 (R)									
Stabilization									
<b>Wetland Crossings</b>									
Indicate location on map	WC-1	WC-2	WC-3	WC-4					
Length of Crossing									
Mitigation									
Stabilization									
<b>Filter Strips</b>									
Indicate location on map	FS-1	FS-2	FS-3	FS-4					
Width (50', 100', or VA)	50'	50'							
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				
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	before plan may be approved and cutting may begin				
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Some forestry activities, such as prescribed burning and				
LO Landowner	PO Poled	ST Stone		GR Gravel	pesticide or fertilizer application may require additional permits				
OT Other	OT Other	HB Hay Bales	OT Other	OT Other	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

pg 3 of 5

Figure 1a: Page one of Massachusetts Forest Cutting Plan

Products to be Harvested* Timber Lot 3147			
Species	Mbf/Cds		Mbf/Cds
White Pine	81.7	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	8.2
Hemlock	9.1	Black Oak	1.8
Spruce		White Oak	0.4
Other Sftwd.		Other Hdwd.	0.8
White Ash		Total Mbf	103
Beech		Cordwood (Cds)	68
White Birch		SW Pulp (Tons)	308
B & Y Birch	0.6	HW Pulp (Tons)	
Black Cherry	0.5	Chips (Tons)	

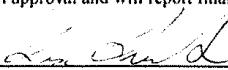
  

Stand Treatment				
Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WII	WII		
Acres	45.5	0.5		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SE	CT		
Source of Regeneration	SE/AD	SE		

Landowner Signature	
<p>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.</p> <p><input checked="" type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p> <p>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.</p>	

Signature of landowner(s)		Date
		8-23-17

Determination and Status <u>204.8989.18</u>		Final Report and Comments																																																									
Approved	Disapproved	Expires																																																									
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>8/25/19</u>																																																									
Signature of Service Forester/Director's Agent 		<u>9/7/17</u>	Date																																																								
Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires / / Ser. For. Ints. / /																																																								
Amendment	App 1 <input type="checkbox"/>	Dis 1 <input type="checkbox"/>	App 2 <input type="checkbox"/> Dis 2 <input type="checkbox"/> Ser. For. Ints. / /																																																								
<p><b>Forest Types</b></p> <table border="0"> <tr> <td>WP White Pine</td> <td>HK Hemlock</td> <td>OM Mixed Oak</td> <td>Designation of Trees</td> <td>Type of Cut</td> <td>Intermediate Harvests:</td> <td>Source of Regeneration</td> </tr> <tr> <td>WK WP/Item</td> <td>IHI Hem/Hdwd</td> <td>RM Red Maple</td> <td>CT Cut Tree</td> <td>SIH Shelterwood</td> <td>CT Commercial Thin</td> <td>AD Advanced</td> </tr> <tr> <td>WH WP/Hdwd</td> <td>BC Blck Cherry</td> <td>BE Beech</td> <td>LT Leave Tree</td> <td>ST Seed Tree</td> <td>NT Non Com Thin</td> <td>SE Natural Seed</td> </tr> <tr> <td>WO WP/Oak</td> <td>BB Beech/Map</td> <td>SF Spruce/Fir</td> <td>SB Stand Boundary</td> <td>CC Clear Cut</td> <td>PL Plant</td> <td>PI Plant</td> </tr> <tr> <td>RP Red Pine</td> <td>OH Oak/Hdwd</td> <td>SM Sugar Maple</td> <td>OT Other</td> <td>SE Selection</td> <td>Non-Standard Systems:<sup>*</sup></td> <td>CO Coppice</td> </tr> <tr> <td>SR Red Spruce</td> <td>OR N Red Oak</td> <td>PP Pitch Pine</td> <td>Landowner Objective</td> <td>SA Salvage</td> <td>HG Highgrade*</td> <td>DS Direct Seed</td> </tr> <tr> <td></td> <td></td> <td></td> <td>LT Long-term Mgt.</td> <td>SN Sanitation</td> <td>DL Diameter Limit*</td> <td>OT Other</td> </tr> <tr> <td></td> <td></td> <td></td> <td>ST Short-term Har</td> <td>OT Other*</td> <td></td> <td></td> </tr> </table>				WP White Pine	HK Hemlock	OM Mixed Oak	Designation of Trees	Type of Cut	Intermediate Harvests:	Source of Regeneration	WK WP/Item	IHI Hem/Hdwd	RM Red Maple	CT Cut Tree	SIH Shelterwood	CT Commercial Thin	AD Advanced	WH WP/Hdwd	BC Blck Cherry	BE Beech	LT Leave Tree	ST Seed Tree	NT Non Com Thin	SE Natural Seed	WO WP/Oak	BB Beech/Map	SF Spruce/Fir	SB Stand Boundary	CC Clear Cut	PL Plant	PI Plant	RP Red Pine	OH Oak/Hdwd	SM Sugar Maple	OT Other	SE Selection	Non-Standard Systems: <sup>*</sup>	CO Coppice	SR Red Spruce	OR N Red Oak	PP Pitch Pine	Landowner Objective	SA Salvage	HG Highgrade*	DS Direct Seed				LT Long-term Mgt.	SN Sanitation	DL Diameter Limit*	OT Other				ST Short-term Har	OT Other*		
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\*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page pg 4 of 5

Figure 1b. Page two of Massachusetts Forest Cutting Plan

# 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.

Timber Lot 3147

Landowner DCR-DWSP-Quab

Town New Salem

File Number 201.8989.18

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.

This harvest consists of 1 half acre (0.5) thinning and an aggregation of 13 canopy openings (patches) spread across 45.5 acres. Opening size ranges from 0.25 to 0.9 acres with an average of 0.5 of an acre. There are a total of 6 acres in openings. All skid roads are marked in orange paint.

Some openings are mark in blue paint. And some are marked with orange paint.

Reservation boundary along this harvest was brushed, blazed, painted (red) and signed; winter 2017.

6

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

Regeneration & 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

Figure 1c. Page three of Massachusetts Forest Cutting Plan

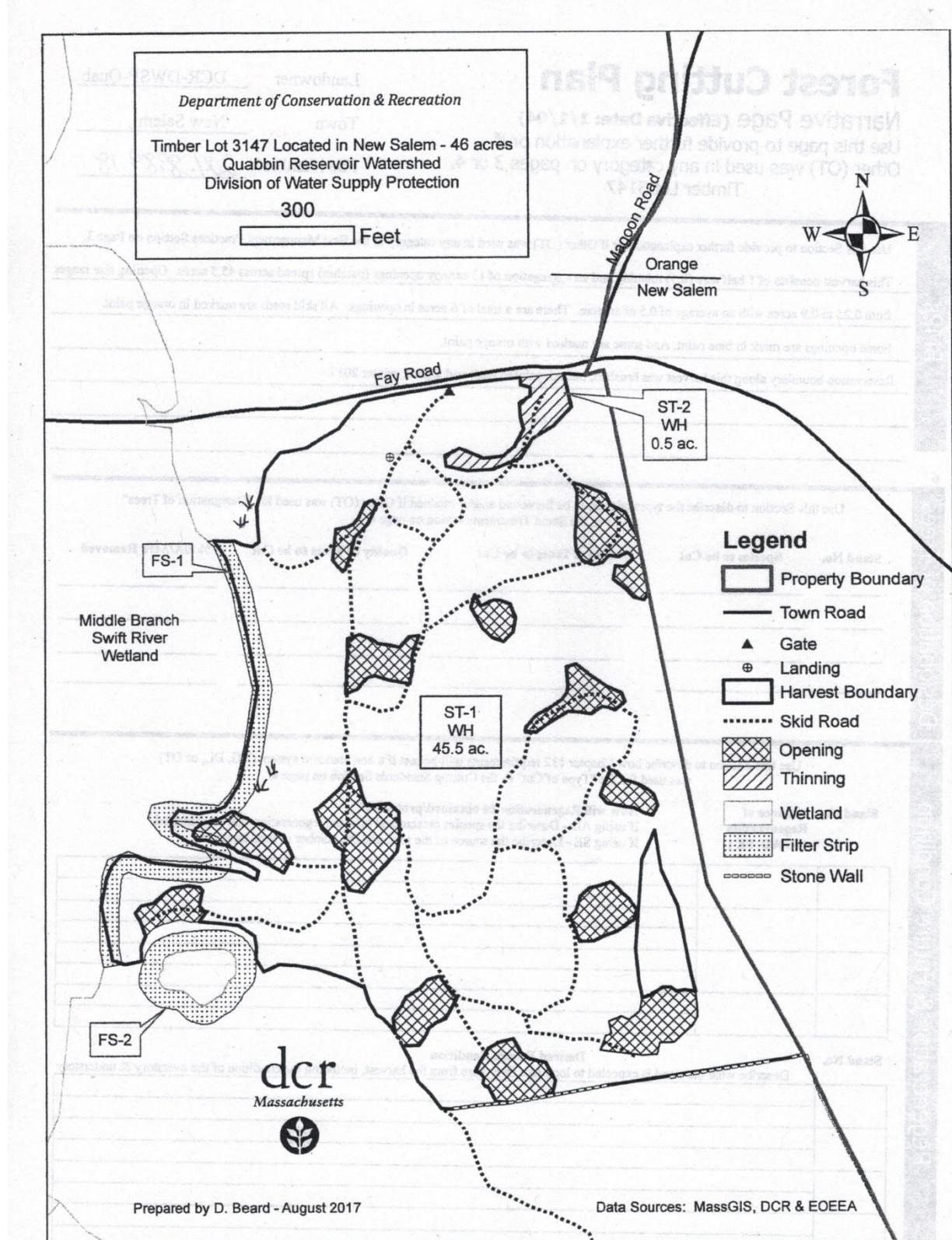


Figure 1d. Page four of Massachusetts Forest Cutting Plan

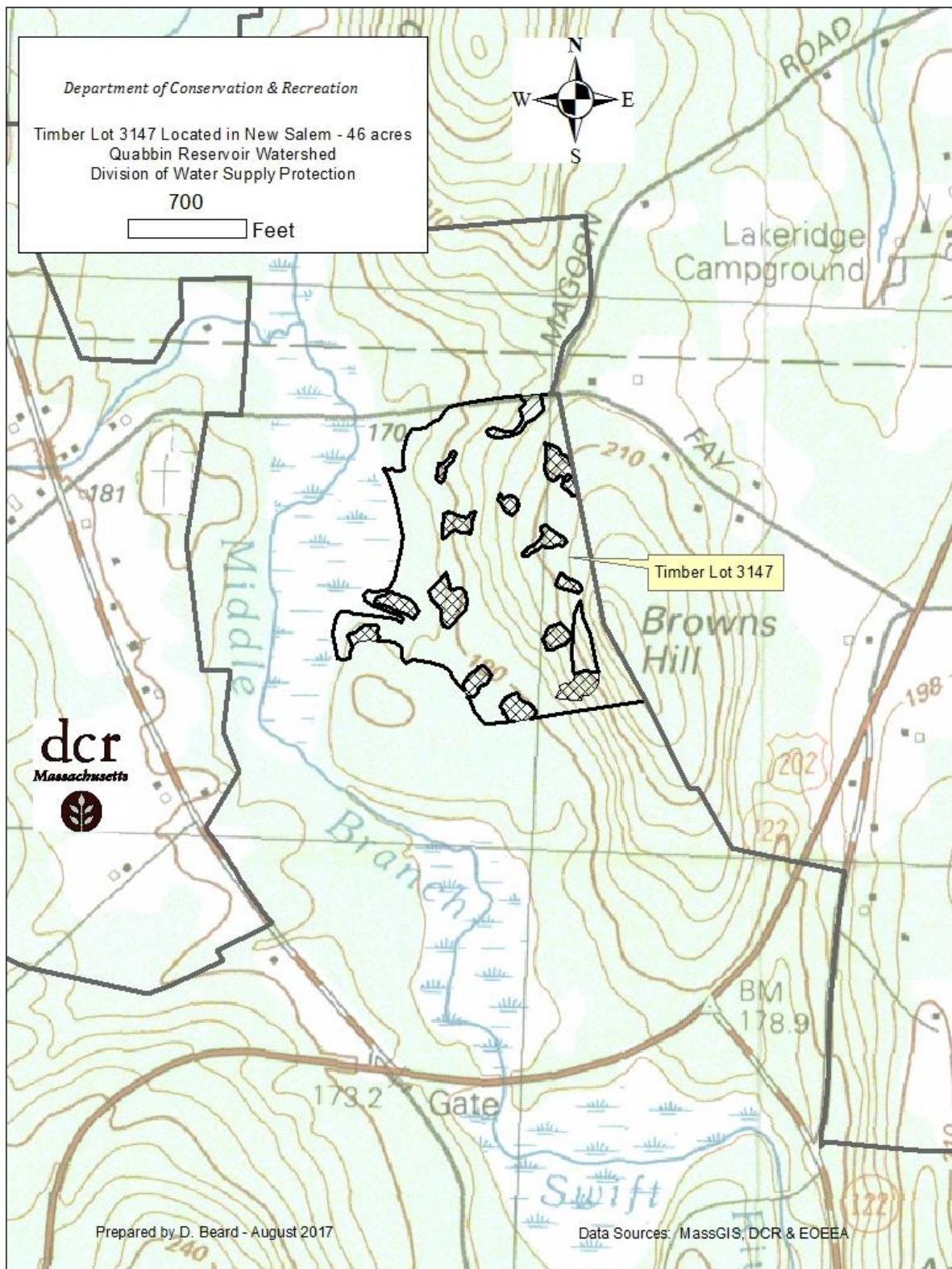


Figure 1e. Page five of Massachusetts Forest Cutting Plan



DIVISION OF  
**FISHERIES & WILDLIFE**

1 Rabbit Hill Road, Westborough, MA 01581  
p: (508) 389-6300 | f: (508) 389-7890

**MASS.GOV/MASSWILDLIFE**

Jack Buckley, Director

Fletcher Clark - Department of Conservation and Recreation  
40 Cold Storage Drive  
P.O. Box 484  
Amherst, MA 01004

Cutting Plan No. 204-8989-18  
NHESP Tracking No. 17-37087  
Town New Salem  
Road Fay Road  
Landowner DCR-DWSP Quabbin  
Preparer Derek Beard  
Date September 5, 2017

Dear Fletcher,

The Natural Heritage and Endangered Species Program ("the NHESP") of the Massachusetts Division of Fisheries and Wildlife ("the Division") has reviewed the above-referenced Forest Cutting Plan ("the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(6)). Based on details of the Plan and information in the NHESP database, the Division does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in "Take" (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). Therefore, the Division does not require that the Plan be modified at this time.

Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact David Paulson at (508) 389-6366 or [david.paulson@state.ma.us](mailto:david.paulson@state.ma.us).

Sincerely,

Thomas W. French, Ph.D.  
Assistant Director

Cc: New Salem Conservation Commission (Via Email)

**MASSWILDLIFE**

Figure 1f. Page six of Massachusetts Forest Cutting Plan



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

FILE # 204-8989-18

WW

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

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  
Fay Rd / '3147 lot.

Approval Date 9/7/17  
Director's Agent Fletcher Clark  
DCR Phone No. (413) 262-2367

ISSUED BY:

A handwritten signature in black ink that appears to read 'Priscilla E. Geigis'.

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

Figure1g. Page seven of Massachusetts Forest Cutting Plan