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

Project Title:

DWSP Harvest Permit Number: 3147	
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	ACEC?: No			
Soils: Merrimac, Hinckley and Canton fine sandy loam				
Wetland Resources: No				
Vernal Pools present or within 200 feet of harvest?: No				

Harvest Information

Harvest Start Date: September, 20, 2017	Harvest End Date: December 6, 2019
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings	None
Filter Strips	2 filter strips; 50 ft. wide
Wetland Crossings	None
Harvesting in Wetlands	None

DWSP Forester supervising this harvest
Name: Derek Beard
Forester License # 14
Phone #: 617-780-0631
Email: derek.beard@state.ma.us

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.

Dominant cover is large sawtimber white pine only broken up by a few acre block of pole size hardwood which regenerated from a 1979 timber harvest.

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 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 for 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 acre 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.

Wildlife/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 a MA Natural Heritage Endanger Species bubble. Upon review by this program; the project was deemed to have no impact on the protected flora and/or fauna.

FIGURES

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)

For DCR U	se Only:		
File Number	204-8989-13	Case No.	
Date Rec'd	8/25/17	Nat. Hert.	yes/
Earliest Start	9/12/17	Nat. Hert. Imp.	'NO
River Basin	Chicagee	Pub. Dr. Wat.	Qualin
Gen. Obj.	LT	ACEC	NO

Location Timber Lot 3147			47		Landowner			
Town New Salem Road Fay Road Acres 46 Proposed Start Date			4 Data	Name DCR - Division of Water Supply Protection Mailing Address 485 Ware Rd.				
Acres <u>46</u> Vol. MBF 103					Town, State, Zip Belchertown, MA 01007			
101111111111111111111111111111111111111					Phone 412-323-6921			
Plan Preparei					Ch61 61A 61B Stew *Case #			
					CR CR Holder			
Name Derek	Beard				Licensed Timber Harvester**			
Address DCR -	- Div. of Wate	r Supply	Protection	n	ricensed nimber narvester			
21 Eln	n St.				Name			
Town, State, Zip 1	New Salem, M	A 0135	5		Address			
Phone	78-544-6343				Town, State, Zip			
Type of Preparer _1	.F				Phone			
*Mass. Forester Lic	ense # 14				Mass. Lic. Harvester #			
*Required for land	under Ch61, C	h61A or	Forest St	ewardsh	**This information may be supplied after the plan is approved, but before work begins.			
·					MOR OCENIA			
Stream Cross	ings				Harvesting in Wetlands			
Indicate location on man	SC-I	SC-2	SC-3	SC-4	Indicate location on map HW-1 HW-2 HW-3 HW-4			
Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Cross Indicate location on map Length of Crossing Mitigation Stabilization Filter Strips		 			Forest Type (see pg 2)			
Existing Structure			 		Acres to be Harvested			
Type of Bottom			 	-	Resid, Basal Area			
Bank Height (ft)		1			(>50%?)			
Stabilization			†	 				
Wetland Cross	sinas		·		Service Forester Comments			
Indicate location on map	WC-1	WC-2	WC-3	WC-4	Je 21 1 1 1 1 1 1 1 1 1			
Length of Crossing				ļ	A Scattered presence of Buckthorn along main skirl Road. Heavy intestation of Buckthorn along Middle Branch of Swiff River. PE 9/7/17			
Mitigation			ļ	ļ	main SKIX Road. Heavy interation of Buckthon			
Stabilization	l	l	<u> </u>	<u> </u>	along Middle Branch of Swiff KNU. It 9/ 7/1;			
Filter Strips								
Indicate location on map	FS-1	FS-2	FS-3	FS-4				
Width (50', 100', or V/	1) 50'	50'						
LF Mass Lie For CU	Culvert Si	nbilization Seed U Mulch	Mitiga FR DR	rozen	Type of Bottom LE Ledge Applicant must provide DCR with all relevant information ST Stony before plan may be approved and cutting may begin			
TB Timber Buyer FO LO Landowner PO	Ford CO Poled ST	Corduro Stone Hav Bal	у ОТ (MU Mud Some forestry activities, such as prescribed burning and GR Gravel pestude or fertilizer application may require additional permits OT Other Consult MA Forestry BMP Manual for further information.			

orest Products

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 Sflwd.		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)	1

*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

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dicate location on map ST-1 ST-2 ST-4 rest Type WH res 45.5 0.5indowner Objective LT LT signation of Trees CT CT pe of Cut SE CT SE/AD Source of Regeneration 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.

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.

l (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.

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Signature of landowner(s)	Date

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Cut

Amendment

	Approved	Disapproved	Exp
ting Plan	Ø		8/
1	4		·

Determination and Status 204.8989.78

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 Fore	ster/Director's ^	rgent	Date	g
Extension	1	2	Expires /	Ser. For. Ints.	
	Ann I	Die I Ann 2	Die 2		

Signature of Service Forester/Director's Agent	Date

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OJC:	st Types				
ХP	White Pine	HK	Hemlock	OM	Mixed Oal
٧ĸ	WP/Hem	1111	Hem/Hdwd	RM	Red Maple
ΝH	WP/Hdwd	BC	Blck Cherry	BE	Beech
VO	WP/Oak	BB	Bce/Bir/Map	SF	Spruce/Fir
ŧΡ	Red Pine	OH	Oak/Hdwd	SM	Sugar Mar
R	Red Spruce	OR	N Red Oak	PP	Pitch Pine

gnation of Trees
Cut Tree
Leave Tree
Stand Boundary
Other
lowner Objective
Long-term Mgt.

Type	of Cut		
SH	Shelterwood	Inte	rmediate Harr
ST	Seed Tree	CT	Commercial '
CC	Clear Cut	NT	Non Com Th
SE	Selection	Non	-Standard Sys
SA	Salvage	HG	Highgrade*
SN	Sanitation	DL	Diameter Lin
		OT	Other*

Source of Regeneration
AD Advanced
SE Natural Seed
PL Plant
CO Coppice
DS Direct Seed
OT Other

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

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

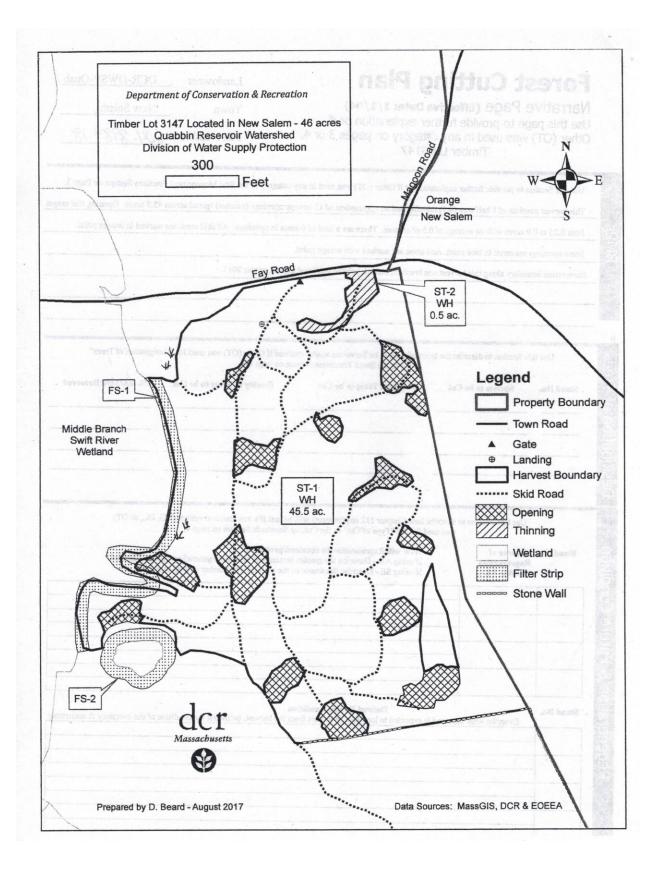
Town

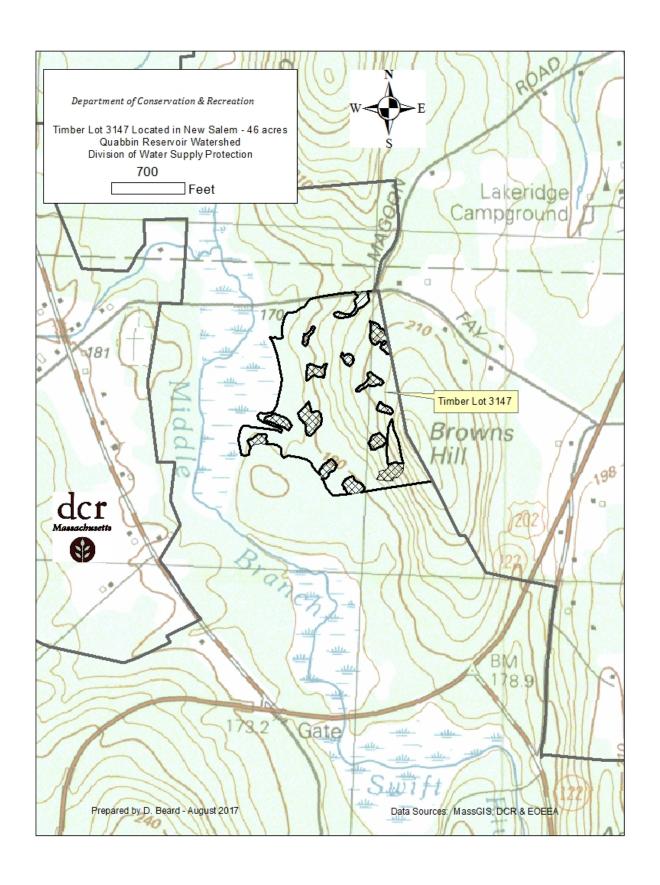
New Salem

File Number

204. 8989.18

		00.5.5	There are a total of 6	opy openings (patches) spread across 4 acres in openings. All skid roads are r	narked in orange paint.
					///
			are marked with orange pain		
Reservation bo	undary along this har	vest was brush	ed, blazed, painted (red) and	signed; winter 2017.	
		5.78	(1)	A STATE OF THE PARTY OF THE PAR	
/		De an			
-/-					
Use th	nis Section to describe	e the types of tr	rees to be harvested and/or re in the Stand Treatment Sec	tained if Other (OT) was used for "De ion on page 4.	signation of Trees"
Stand No.	Species to be Co	ut S	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Remove
bacři n	Wolf seemed				100 10 to 100
	de Get	7	100	Dec(3) 1/	Swift River
grit	78 T G		100		
			A-1	150P401 131	
ye st Soun ds	(at language	+,=	AND THE		
re et Soun dr Road rang		18	-004 -128 -1.10x0	The net if a non standard system (HG	DL or OT)
Stand No.	Lice this Section to	was used for th	will Regeneration be obtained AD. Describe the species	l be met if a non standard system (HG ng Standards Section on page 4. ned/protected? present and how the regeneration wil of the seed and the number of seed tree	l be protected
Stand No.	Use this Section to Source of Regeneration	was used for th	will Regeneration be obtained AD. Describe the species	ng Standards Section on page 4. med/protected? spresent and how the regeneration will	l be protected
Stand No.	Use this Section to Source of Regeneration	was used for th	will Regeneration be obtained AD. Describe the species	ng Standards Section on page 4. med/protected? spresent and how the regeneration will	l be protected
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Stand No.	Use this Section to of Source of Regeneration (ex. AD, SE)	was used for th How If usin If usin	will Regeneration be obtaing AD - Describe the specieng SE - Describe the source	ned/protected? spresent and how the regeneration will of the seed and the number of seed tree.	I be protected es/acre
Stand No.	Use this Section to of Source of Regeneration (ex. AD, SE)	was used for th How If usin If usin	will Regeneration be obtaing AD - Describe the specieng SE - Describe the source	ned/protected? spresent and how the regeneration will of the seed and the number of seed tree	I be protected es/acre







FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 | f: (508) 389-7890 M A S S . G O V / M A S S W I L D L I F E

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.

Sincerely,

Cc:

Thomas W. French, Ph.D.

Assistant Director

New Salem Conservation Commission (Via Email)

MASSWILDLIFE

COMMONWEALTH OF MASSACHUSETTS

Department of Conservation and Recreation Division of State Parks and Recreation

FILE # 204.8989 - 18



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 DC2 - DWSP 485 Ware Ed, Belcherhoun, HA in accordance with the (Name of Owner) (Address)

provision of M.G.L. Chapter 132, Section 40-46, filed in Ambersh £0. 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 / 31471ot.

Approval Date 9/1/17

Director's Agent Helder Clark

DCR Phone No. (413) 262-2367

ISSUED BY:

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