# 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:** 3154 **DCR Forest Cutting Plan File Number:** 204-9193-18

#### **Site Information**

Watershed: Quabbin	Town(s): New Salem
Acres: 51	Nearest Road: Cooleyville, Gate 17
Natural Heritage Atlas overlap?: Yes	Public Drinking Water Supply Watershed?: Yes
Forest Types: Oak/Hardwood	ACEC?: No
Soils: Gneiss derived rock sandy loam	
Wetland Resources: Yes	
Vernal Pools present or within 200 feet of harve	est?: No

## **Harvest Information**

Harvest Start Date: March, 27, 2018	Harvest End Date: June 30, 2020
Number of Wetland Crossings: None	Number of Stream Crossings: 2

## **Best Management Practices Applied**

Stream Crossings	2
Filter Strips	4 filter strips
Wetland Crossings	None
Harvesting in Wetlands	None

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

# NARRATIVE

### General Description/Forest Composition/History:

This watershed forest management project covers 51 acres of forest located 2/3s the way down the Prescott Peninsula. Specifically, it's about 2 miles south of the old UMASS observatory site on the east side of the gate 17 Road (Prescott Rd). It's bounded to the north by an old property line, to the east by stone wall old timber lot boundary and old bull dozed woods road, to the south by Gibbs Brook and to the east by a wetland.

The project is home to mixed hardwood including red maple, the oaks and black birch. The primary goal of the harvest is to remove low quality timber and spur development of a new (young) forest age class.

### 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:

The main goal of the project is to diversify forest structure. This will be accomplished by creating openings (a.k.a. patches) in the forest canopy. Specifically, this project has 5 openings, all about 2 acres in size. Openings greater than 0.5 acres have retention trees which will add to future forest complexity.

### **Cultural Resources:**

The area's remote location relative to existing roads was indicative of scarce cultural resources. Just some stone wall which forms part of the east harvest boundary.

### 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.

# **FIGURES**

Figure 1. Forest Cutting Plan

Figure 2. Pre-Harvest Photos

<b>Forest Cu</b> nd Notice of Inter hapter 132 – The actices Act, 304 ( iffective Date: 1/1/04	nt under M Forest Cu CMR 11.00	I.G.L. Itting	an		For DCR Use Only:           File Number         204.9193.18         Case No.           Date Rec'd         12.28.17         Nat. Hert.         YES / 17           Earliest Start         1.15.18         Nat. Hert.         YES / 17           River Basin         Chico 122         Pub. Dr. Wat.         M           Gen. Obj.         LT         ACEC
Location	Timber L	ot 315	54		Landowner
Town New Sale Road <u>Cooleyvi</u>	ille Rd. (Gate	17) osed Star		ŧ	Name <u>DCR – Division of Water Supply Protection</u> Mailing Address <u>485 Ware Rd</u> .
Acres51 Vol. MBF <u>57.6</u>				s <u>60</u>	Phone <u>412-323-6921</u>
		49757220000000000000000000000			Ch61 61A 61B Stew *Case # CR CR Holder
Address DCR - 21 Elm	- Div. of Wate	r Supply	Protectic	on	Licensed Timber Harvester** Name
Town, State, Zip N					Address
Type of Preparer *Mass. Forester Lice					Phone Mass. Lic. Harvester #
*Required for land u	under Ch61, C	h61A or	Forest St	tewardshi	**This information may be supplied after the plan is approved, but work begins.
		h61A or .	Forest St	tewardshi	
*Required for land u		h61A or . SC-2	Forest St	tewardshi	p work begins.
*Required for land to Stream Cross Indicate location on map	ings				P       work begins.         Harvesting in Wetlands         Indicate location on map       HW-1       HW-2       HW-3       E         Forest Type (see pg 2)       Income of the second secon
*Required for land to Stream Cross Indicate location on map	ings SC-1	SC-2			P work begins. Harvesting in Wetlands Indicate location on map HW-1 HW-2 HW-3 E Forest Type (see pg 2) Acres to be Harvested
*Required for land u Stream Cross Indicate location on map Type of Crossing	ings SC-1 BR	SC-2 BR			P work begins. Harvesting in Wetlands Indicate location on map HW-1 HW-2 HW-3 E Forest Type (see pg 2) Acres to be Harvested Resid. Basal Area
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*Required for land to Stream Crossing Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization	SC-1           BR           No           St/mu           < 1'	SC-2 BR No St/mu			P       work begins.         Harvesting in Wetlands         Indicate location on map       HW-1       HW-2       HW-3       E         Forest Type (see pg 2)
*Required for land to Stream Cross Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Cross	SC-1           BR           No           St/mu           < 1'	SC-2 BR No St/mu < 1'	SC-3	SC-4	P work begins. Harvesting in Wetlands Indicate location on map HW-1 HW-2 HW-3 E Forest Type (see pg 2) Acres to be Harvested Resid. Basal Area
*Required for land to Stream Cross Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Cross Indicate location on map	SC-1           BR           No           St/mu           <1'	SC-2           BR           No           St/mu           < 1'			P       work begins.         Harvesting in Wetlands         Indicate location on map       HW-1       HW-2       HW-3       E         Forest Type (see pg 2)
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*Required for land u Stream Cross Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Cross Indicate location on map Length of Crossing Mitigation	SC-1           BR           No           St/mu           <1'	SC-2           BR           No           St/mu           < 1'	SC-3	SC-4	P       work begins.         Harvesting in Wetlands         Indicate location on map       HW-1       HW-2       HW-3       E         Forest Type (see pg 2)
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*Required for land u Stream Cross Indicate location on map 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	SC-1         BR           No         St/mu           <1'	SC-2           BR           No           St/mu           < 1'	SC-3	SC-4	P       work begins.         Harvesting in Wetlands         Indicate location on map       HW-1       HW-2       HW-3       F         Forest Type (see pg 2)

Species	мърсњ		MbPCds
White Pine	9.8	Red Maple	18.9
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	11.5
Henlick		Black Oak	6.4
Spruke:		While Onk	1.0
Other SBwd.		Other Hdwd.	
White Ash	3.3	Tetal Mhf	57.6
Reach		Cordwood (Cds)	203
White Birch		SW Pulp (Tens)	-60
B & Y Birch	6.3	HW Pulp (Toos)	
Black Chorey	0.4	China (Tons)	

Note: Volumes and values indicated in the Plan are as reported by the plun preparer and have not been independently verified by the service forester upon approval. Mbf = shousand board feet.

	Constant .			
Indicate location on map	ST-f	ST-2	ST-3	ST-4
Forest Type	. 011			
Acres	51			
Landowner Objective	LT	1		
Designation of Trees	LT			
Type.pf Cit	SE			
Source of Repropriation	SEWE	]	1	

#### Landowner Signature

Landowner

The most important information on a cutting plan is the Landowner's objective, as this will determine which trees will be barvested and which will remain; this decision will also determine the future condition of the forest for decades to none. After having read the Massachusetta Forest Cutting Plan Information Steet on page one, indicate your objective by checking the appropriate box below.

K 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 - Shart-term Harvest Harvest of trees with the main mention of postucing short-term income with minimal consideration gives to improving the foture forest condition, which often results in a forest dominated by poor quality and low value species

I (we) have read the Mossociausetts Cutting Plan Information Sheet, and am aware of my (our) management options.

I (we) hereby certify that I (ws) 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 htatdred feet of the aces to be harvested.

I (we) understand that the volumes and values (Cb6) only] in this plan have not been independently verified by the service forester open approval and will report final values and volumes to the Director or his/her agent if the Jinal figures differ from those reported.

Determin	ation and Status 204-9193-18	Final Report and Comments		
Cutting Plan Stenerure of Se Extension Amendmont	Approved Disapproved Expires $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	I hereby certify that the aftere described Porest Cutting Plan     and all relevant spontes have been substantially complied with		
	Designation of Test EDK Hembook OM Missel Cub. CT Du Tree Hit Hembiok DM Red Martis LT Leave Tree	M Taptel(Cu) Stice: of Resented SH Sticlerwood Intermediate Harveste: AD Advanced ST Seat Tree CT Contacted Thin SE Natural Seed by CE Clear Cur NT Non Com Thin PL Plant		

Forest	Cutting	Plan
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BMPs

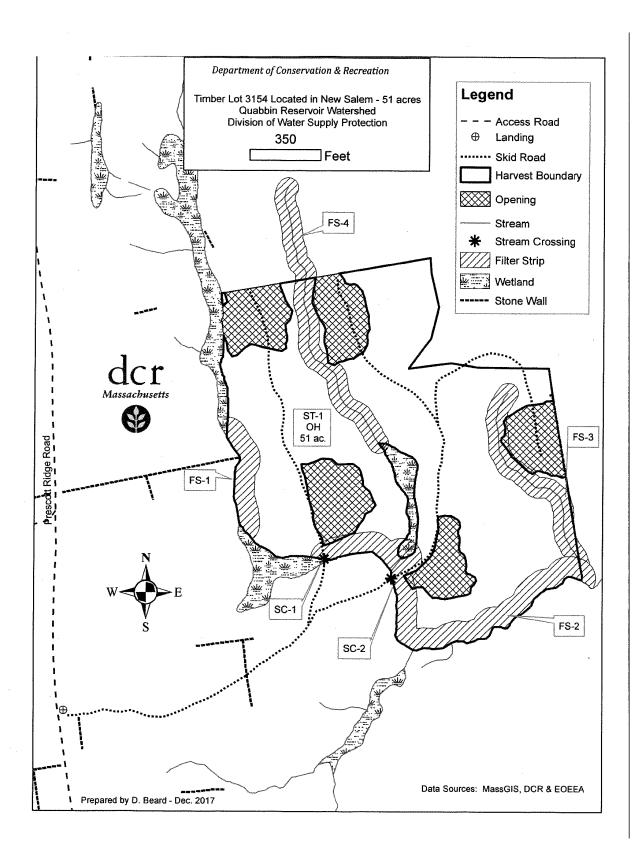
Landowner	DCR-DWSP-	Quab
Town	New Salem	••••

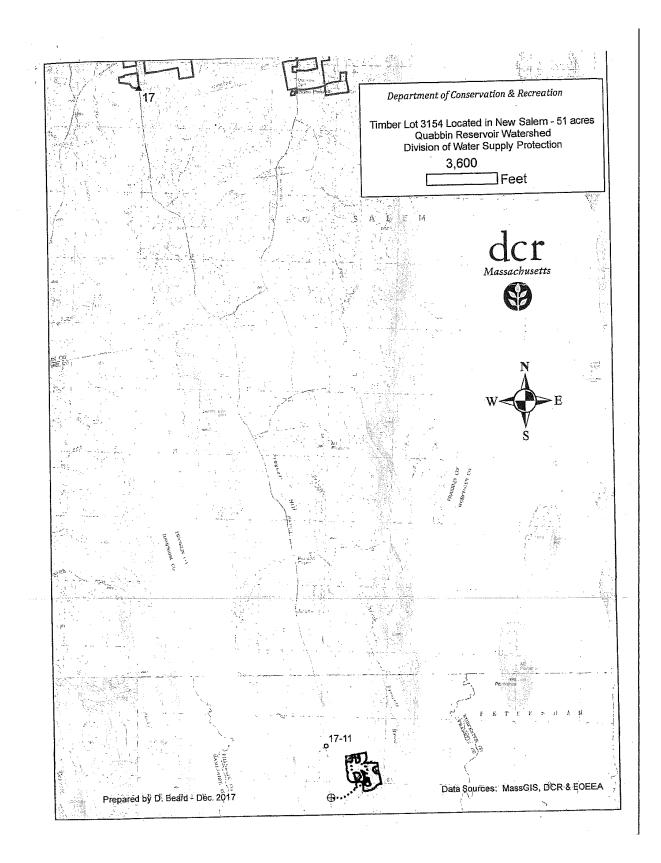
Narrative Page (Effective Date: 1/1/04) Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4. Timber Lot 3154

File Number	204.9193.18
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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 project covers a 51 acre oak/mixed hardwood area. There are five openings encompassing a total area of 10 acres. Each opening is approximately 2 acres in size. All openings have some retention (min. 5 sqr. ft. of basal area per acre) which include live and dead standing trees. The landing and main skid roads are marked in neon orange paint. All openings are marked in regular orange or yellow paint. Harvest boundary is a mix of flagging and triple striped paint marking.

Stand No.	lo. Species to be Cut		Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Remove
	-				
	· · ·				
	<del></del>				
and a substantial data of the substantis data of the substantial data of the substantial data of the s	Use this Section	to describe	how Chapter 132 requirements wi	ll be met if a non standard system (HG,	DL, or OT)
	Ose this beenon	was used	for the "Type of Cut" in the Cutti	ng Standards Section on page 4.	
Stand No.	Source of		How will Regeneration be obtai	ned/protected?	
Stand No.	Regeneration		If using AD - Describe the specie	s present and how the regeneration will	be protected
	(ex, AD, SE )		If using SE - Describe the source	of the seed and the number of seed tree	s/acre
- L		1	· · · ·		· · · · · · · · · · · · · · · · · · ·
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Stored No.			Desired Future Condit		
Stand No.	Describe what	the stand is	Desired Future Condit	· · · · · · · · · · · · · · · · · · ·	of the overstory & under
Stand No.	Describe what	the stand is	Desired Future Condit		of the overstory & under
Stand No.	Describe what	the stand is	Desired Future Condit		of the overstory & under
Stand No.	Describe what	the stand is	Desired Future Condit		of the overstory & under
Stand No.	Describe what	the stand is	Desired Future Condit		of the overstory & under







# DIVISION OF

1 Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 | f: (508) 389-7890 MASS.GOV/MASSWILDLIFE

Jack Buckley, Director

Sean Libbey \* Department of Conservation and Recreation 40 Cold Storage Drive Amherst, MA 01004

Cutting Plan No.	204-9193-18 17-37280a New Salem Cooleyville Road		
NHESP Tracking No.			
Town			
Road			
Landowner	DCR-Watershed Protection		
Preparer	Derek Beard		
Date	January 2, 2018		

#### Dear Sean,

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,

7L

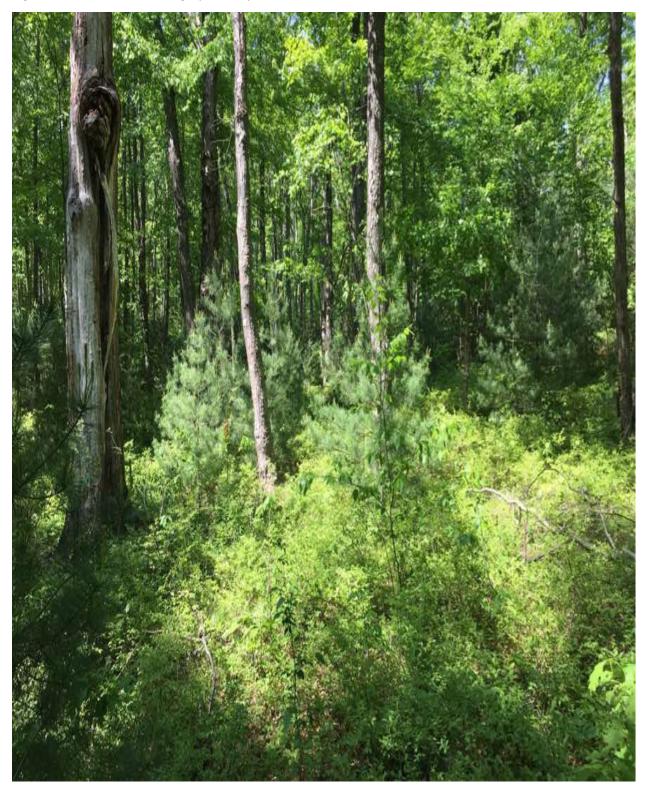
Thomas W. French, Ph.D. Assistant Director

Cc: New Salem Conservation Commission

#### MASSWILDLIFE

TTS FILE # 204.9/93./8	TIFICATE	a in which the harvesting operation is to take place. 485 War Rd, Belchertwar, UA in accordance with the (Address)	<b>Derst F.O.</b> with the Dept. of Conservation of Intent to cut forest products upon the	Issued BY: Reverted A
COMMONWEALTH OF MASSACHUSETTS Department of Conservation and Recreation Division of State Parks and Recreation	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 $DQ - DWSP + 485 War Rd, Bel cherbern, H$ . (Name of Owner) (Address)	provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst F.O. with the Dept and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the Derviville Rol lot. New Salem.	/ ( (make 17) Approval Date 1/2/18 Director's Agent Seare Lubbery DCR Phone No. (413) 545-4539

Figure 2. Pre-Harvest Photographs, May 2018



Large snag in left foreground

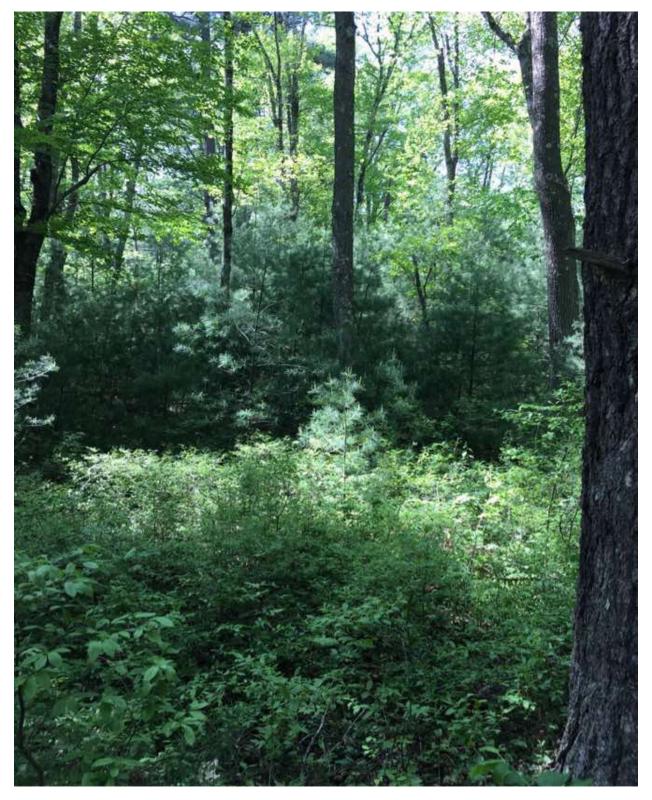
Figure 2. Post Harvest, July, 2020



Figure 2. June 2021



Figure 3. Pre -Harvest, May 2018



3154 -cp-2

Figure 3. Post Harvest, July 2020



Figure 3. June 2021

