

**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> S16NQ
<b>DWSP Proposal ID:</b> PR-21-10
<b>DCR Forest Cutting Plan File Number:</b> 204-32470-22

**Site Information**

<b>Watershed:</b> Quabbin	<b>Town(s):</b> New Salem
<b>Acres:</b> 15.7	<b>Nearest Road:</b> Cooleyville, Gate 17
<b>Natural Heritage Atlas overlap?:</b> Yes	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> White Pine/Red Pine	<b>ACEC?:</b> No
<b>Soils:</b> Gneiss derived rock sandy loam	
<b>Wetland Resources:</b> No	
<b>Vernal Pools present or within 200 feet of harvest?:</b> No	

**Harvest Information**

<b>Harvest Start Date:</b> September, 13, 2021	<b>Harvest End Date:</b> December 15, 2023
<b>Number of Wetland Crossings:</b> None	<b>Number of Stream Crossings:</b> 3

**Best Management Practices Applied**

<b>Stream Crossings</b>	Temporary Skid Bridges
<b>Filter Strips</b>	Variable Width
<b>Wetland Crossings</b>	None
<b>Harvesting in Wetlands</b>	None

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

ACEC: Area of Critical Environmental Concern

## **NARRATIVE**

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

This watershed forestry project covers 15.7 acres; most of which is a White/Red Pine forest (all the red pine is plantation) located just north of the old UMASS observatory site on the west side of the gate 17 Road (Prescott Rd). Ancillary to the main project is a 2 acre section to the south and east that has excellent white pine regeneration with an overstory of dead/dying hemlock, black birch and white pine.

The main area was thinned in 1990. Beginning in the early to middle 2000s red pine, throughout the watershed, began to rapidly die from a severe red pine scale infestation. The microscopic bug pierces the host's cambial layer disrupting the flow of water and nutrients leading to desiccation. A sure sign is the browning (rust color) of needles from late spring through summer. No work has occurred in the ancillary section since the mid 1960s.

### **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.

### **Silvicultural Objectives:**

Harvest purpose is to ameliorate further red pine mortality by removing the plantations, improving timber quality of native species (primarily white pine) and release/spur growth of a young forest age class. Achievement of these objectives should lead to a more diverse resilient forest over the long term.

### **Cultural Resources:**

Stone walls are the most prominent cultural resource in the project area. There are also two old field stone wells that have been identified.

### **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, territorial marking/scenting and foraging is a priority.

The project area did fall in a natural heritage bubble. Upon MA Natural Heritage and Endanger Species program review, the project was deemed to have no impact on the priority specie(s).

## **FIGURES**

Figure 1. Forest Cutting Plan

Figure 2. Camera Post Photographs

<b>Forest Cutting Plan</b>		<b>For DCR Use Only:</b>	
and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00 (Effective Date: 3/15/16)		File Number <u>204.32470.22</u>	Case No. <u>NA</u>
		Date Rec'd <u>08/12/2021</u>	Nat. Hert. <u>True</u>
		Earliest Start <u>08/27/2021</u>	Pub. Dr. Wat. <u>Yes</u>
		River Basin <u>Chicopee</u>	ACEC <u>False</u>
		Gen. Obj. <u>LT</u>	

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### Location

Town New Salem  
Road Cooleyville Rd. (Gate 17)  
Acres 15.70 Proposed Start Date 10/05/2021  
Vol. MBF 246.000 Vol. Cds. 99 Vol. Tons 350

### Plan Preparer

Name Derek Beard  
Address 485 Ware Rd.

Town, State, Zip Belchertown MA 01007  
Phone 617-780-0631  
Type of Preparer LF  
\*Mass. Forester License # 14  
\*Required for land under Ch61, Ch61A or Forest Stewardship

### Landowner

Name DCR Div. of Water Supply Protection  
Mailing Address 485 Ware Rd

Town, State, Zip Belchertown MA 01007  
Phone 413-323-6921  
Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ \*Case # \_\_\_\_\_  
FSC ☐ CR ☐ CR Holder \_\_\_\_\_

### Licensed Timber Harvester\*\*

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Town, State, Zip MA  
Phone \_\_\_\_\_  
Mass. Lic. Harvester # \_\_\_\_\_  
\*\*This information may be supplied after the plan is approved, but before work begins.

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### Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing	CU	FO	BR	
Existing Structure	Yes	No	No	
Type of Bottom	ST	GR	ST,MU	
Bank Height (ft)	2.00	0.50	1.00	
Stabilization	CO	CO	CO	

### 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	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

No Heritage Impact.

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### 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.
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits.
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Consult MA Forestry BMP Manual for further information.
LO Landowner	PO Poled	ST Stone		GR Gravel	
OT Other	OT Other	HB Hay Bales		OT Other	

If Other (OT) is used in any category an explanation must be given on an attached narrative page

pg 3 of 6

## Products to be Harvested\*

Species	Mbf/Cds		Mbf/Cds
White Pine	64.300	Red Maple	4.300
Red Pine	159.800	Sugar Maple	
Pitch Pine		Red Oak	2.300
Hemlock	1.300	Black Oak	0.900
Spruce		White Oak	0.400
Other Sftwd.		Other Hdwd.	0.300
White Ash	6.000	Total Mbf	246.000
Beech		Cordwood (Cds)	99.000
White Birch		SW Pulp (Tons)	350.000
B & Y Birch	4.200	HW Pulp (Tons)	
Black Cherry	2.200	Chips (Tons)	

\*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

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	RP	RP	WP	
Acres	12.600	1.800	1.300	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SA	SA	ST	
Source of Regeneration	AD,SE	AD,SE	AD,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.

☒ **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.

*(see stamp)*

Signature of landowner(s)

Date

## Determination and Status

Approved ☒ Disapproved ☐ Expires 08/12/2023

Signature of Service Forester/Director's Agent *[Signature]* Date 08/30/2021

Extension 1 ☐ 2 ☐ Expires Ser. For. Ints. 1  
Amendment App 1 ☐ Dis 1 ☐ App 2 ☐ Dis 2 ☐ 1

## Final Report and Comments

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

*[Signature]* 11-29-22  
Signature of Service Forester/Director's Agent Date

Forest Types	Designation of Trees	Type of Cut	Source of Regeneration
WP White Pine	HK Hemlock OM Mixed Oak	CT Cut Tree	SH Shelterwood
WK WP/Hem	HH Hem/Hdwd RM Red Maple	LT Leave Tree	ST Seed Tree
WH WP/Hdwd	BC Blck Cherry BE Beech	SB Stand Boundary	CC Clear Cut
WO WP/Oak	BB Bee/Bir/Map SF Spruce/Fir	OT Other	SE Selection
RP Red Pine	OH Oak/Hdwd SM Sugar Maple	Landowner Objective	SA Salvage
SR Red Spruce	OR N Red Oak PP Pitch Pine	LT Long-term Mgt.	SN Sanitation
		ST Short-term Har.	

\*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page pg 4 of 6

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 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.

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I (we) have read the Massachusetts Cutting Plan Information Sheet, and aware of my (out) 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 are 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.

Signature of landowner(s)



8-11-2021

# Forest Cutting Plan

Narrative Page (Effective Date: 3/15/16)

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

Landowner of Water Supply Prote

Town New Salem

File Number 204.32470.22

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.

Intent of project is to salvage remaining (alive) red pine which has been dying over the past decades due to scale infestation and associated needle casts/fungus'. Secondary objective is to upgrade the quality of the residual white pine saw timber. Stand 3 has a specific goal of releasing advanced white pine regeneration and hopefully trigger additional white pine seedling germination. All timber to be harvested is marked with blue paint. Main skid roads are marked with orange paint.

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. Additional narrative description may be added on a separate page.

Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

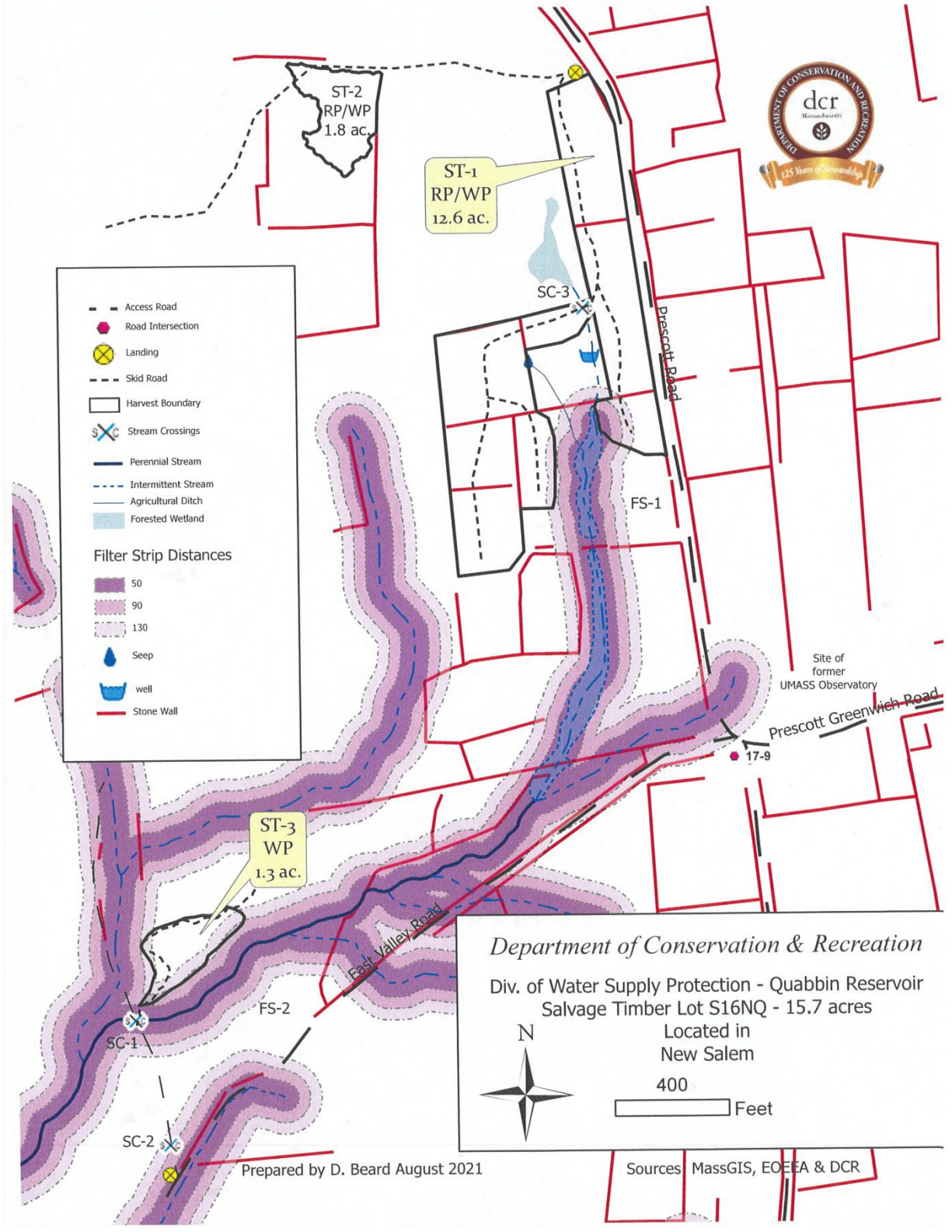
Regeneration & Future Condition

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.

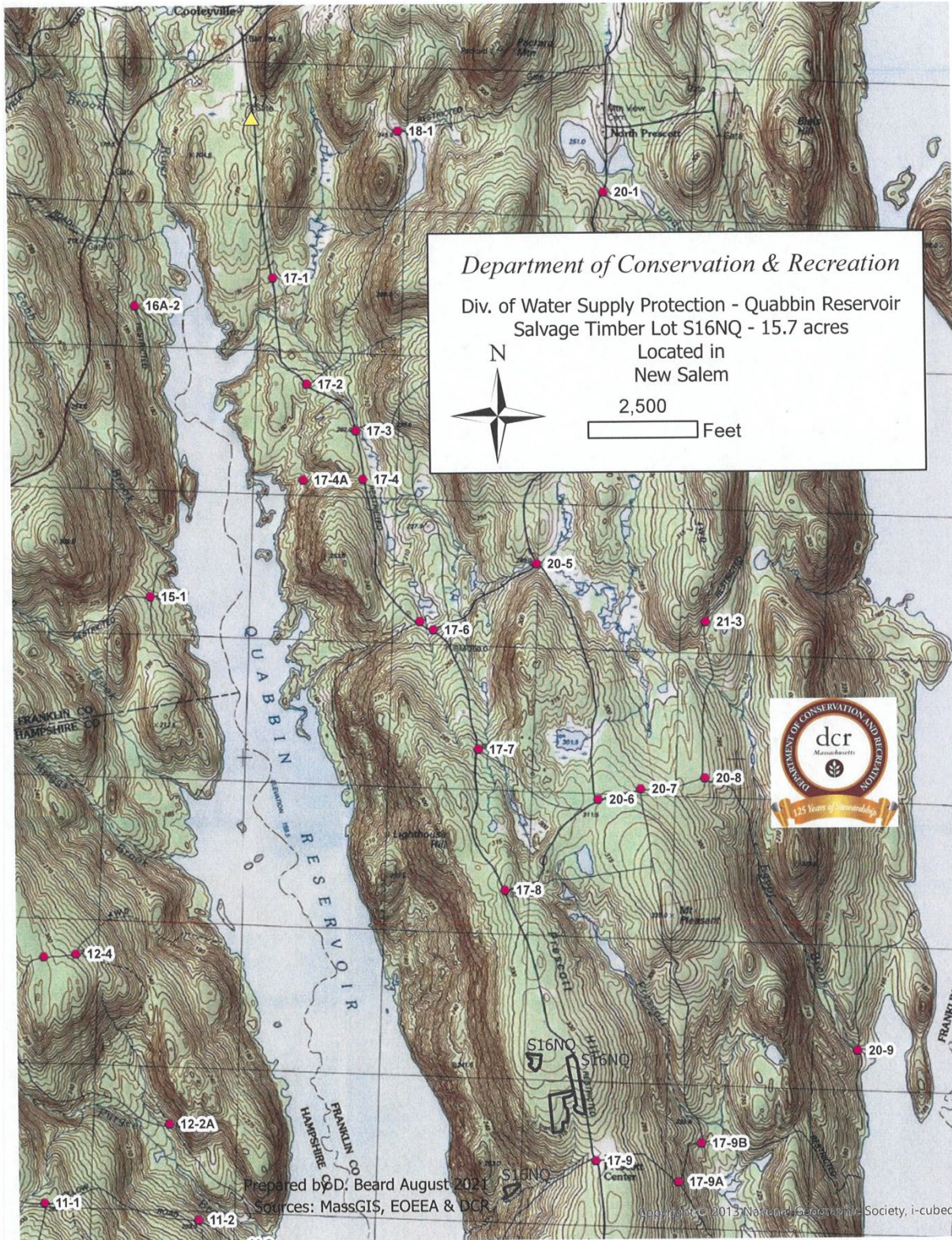
Stand No.	Source of Regeneration (ex. AD, SE )	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre
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Stand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

## DIVISION OF FISHERIES & WILDLIFE

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

Andrew Rawcliffe  
Department of Conservation and Recreation  
40 Cold Storage Drive  
Amherst, MA 01004

Cutting Plan No.	204.32470.22
NHESP Tracking No.	21-40457
Town	New Salem
Road	Cooleyville Rd, Gate 17
Landowner	DCR DWSP, Quabbin
Preparer	Derek Beard
Date	August 27, 2021

Dear Andrew,

The Natural Heritage and Endangered Species Program (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 our 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 Rebekah Zimmerer at (508) 389-6354 or [Rebekah.zimmerer@mass.gov](mailto:Rebekah.zimmerer@mass.gov).

Sincerely,

A handwritten signature in cursive script, reading "Everose Schlüter".

Everose Schlüter, Ph.D.  
Assistant Director

Cc: New Salem Conservation Commission

MASSWILDLIFE

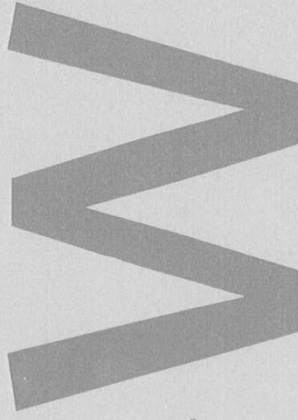


dcf

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



FILE # 204-32470-22



## 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 Div Watershed Protection 485 Wm Rd Belkinstown, MA  
(Name of Owner) (Address) in accordance with the

provision of M.G.L. Chapter 132, Section 40-46, filed in AMF with the Dept. of Conservation

and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the

Cooksville Rd. lot.

Approval Date

8:30-21

Director's Agent

Andrew Rauschke

DCR Phone No.

617-549-1677

ISSUED BY:

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

Figure 2. Camera Post Photographs



Pre-harvest photo, September 2021





Post-harvest, Dec. 2021





1 year of growth, June 2022