

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

Project Title: Gate 20 Road Red Pine
DWSP Harvest Permit Number: 3158
DWSP Proposal ID: PR-17-15 & PR-19-20-B
DCR Forest Cutting Plan File Number: 204-9779-19

Site Information

Watershed: Quabbin
Town(s): New Salem
Acres: 11.5
Nearest Road: North Prescott (Gate 20)
Natural Heritage Atlas overlap?: Yes
Public Drinking Water Supply Watershed?: Yes
Forest Types: Red Pine
Area of Critical Environmental Concern (ACEC)?: No
Soils: Canton-Chatfield-Hollis Complex, Montauk fine sandy loam
Wetland Resources: Yes
Vernal Pools: Yes (within 200 feet)

Harvest Information

Harvest Start Date: June 3, 2019
Harvest End Date: July 3, 2019
Number of Wetland Crossings: 0
Number of Stream Crossings: 0

Best Management Practices Applied

Stream Crossings: None
Filter Strips: None
Wetland Crossings: Not Applicable
Harvesting in Wetlands: Not Applicable

DWSP Forester supervising this harvest

Name: Derek Beard
Forester License number: 14
Phone number: 617-780-0631
Email: derek.beard@mass.gov

Narrative

General Description/Forest Composition/History

This watershed forestry project covers 11.5 acres located about 2 miles inside gate 20 (North Prescott Rd.). Specifically, it is two separate areas (both east of the road) being 3.5 and 8 acres respectively. The areas encompass red pine planted in the late 1930/early 1940s (Civilian Conservation Corp Era "CCC"). They were thinned in the mid 1970s, late '80s and early 2000s.

Site Selection

Around 2005 red pine plantations all around the watershed came under attack by a microscopic bug, the Red Pine Scale, which developed into a full fledged infestation and eventual mortality; particularly within plantations located near the reservoir. Although the voracity of the initial infestation has ebbed the insect is still present and continues to attack more interior plantations (such as these) throughout the watershed.

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. The presence of the Red Pine Scale coupled with strong advanced regeneration merits some regeneration harvesting.

Silvicultural Objectives

Project intent is to remove remaining red pine before succumbing to insect/disease and release regeneration spurred by prior thinning. This is being accomplished by removing three separate patches of red pine (all under 5 acres in size) which will enable the existing understory to robustly develop. Dead and Live standing trees with sign of wildlife use (these trees are known as snags) have been retained along with some healthy well- formed white pine. At landscape scale, the project will contribute to continual forest diversification.

Cultural Resources

Stone walls are the most prominent cultural resource in the project area.

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. Falling in a natural heritage bubble, the project area was reviewed by MA Natural Heritage and Endanger Species program and deemed to have no impact on the specie(s) within the bubble.

Although not present in, several vernal pools are adjacent to the project's east boundary. To minimize disruption chance, a 50 foot no cut buffer has been established around the pools.

Figures

- Figure 1. Forest Cutting Plan

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: 3/15/16)

For DCR Use Only:	
File Number <u>204-9779-19</u>	Case No. <u>-</u>
Date Rec'd <u>2-15-19</u>	Nat. Hert. <u>Yes</u>
Earliest Start <u>3-5-19</u>	Pub. Dr. Wat. <u>No</u>
River Basin <u>Chicopee</u>	ACEC <u>No</u>
Gen. Obi. <u>LT</u>	

Site Information	Location	Landowner
	Town <u>New Salem</u>	Name <u>DCR - Div. of Water Supply Protection</u>
	Road <u>North Prescott Rd. (Gate 20)</u>	Mailing Address <u>485 Ware Rd.</u>
	Acres <u>11.5</u> Proposed Start Date _____	Town, State, Zip <u>Belchertown, MA 01007</u>
	Vol. MBF <u>159.1</u> Vol. Cds. <u>41</u> Vol. Tons <u>91</u>	Phone <u>413-323-6921</u>
	Plan Preparer	Ch61 <input type="checkbox"/> 61A <input type="checkbox"/> 61B <input type="checkbox"/> Stew <input type="checkbox"/> *Case # _____
	Name <u>Derek Beard</u>	FSC <input type="checkbox"/> CR <input type="checkbox"/> CR Holder _____
	Address <u>485 Ware Rd.</u>	Licensed Timber Harvester**
	Town, State, Zip <u>Belchertown, MA 01007</u>	Name _____
	Phone <u>(617) 780-0631</u>	Address _____
Type of Preparer <u>Forester</u>	Town, State, Zip _____	
*Mass. Forester License # <u>14</u>	Phone _____	
*Required for land under Ch61, Ch61A or Forest Stewardship	Mass. Lic. Harvester # _____	

**This information may be supplied after the plan is approved, but before work begins.

Best Management Practices	Stream Crossings	Harvesting in Wetlands																												
	Indicate location on map	<table border="1"> <tr> <th>SC-1</th> <th>SC-2</th> <th>SC-3</th> <th>SC-4</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type of Crossing</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Existing Structure</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type of Bottom</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bank Height (ft)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stabilization</td> <td></td> <td></td> <td></td> </tr> </table>	SC-1	SC-2	SC-3	SC-4					Type of Crossing				Existing Structure				Type of Bottom				Bank Height (ft)				Stabilization			
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Resid. Basal Area (>50%?)																														
Wetland Crossings	Service Forester Comments																													
Indicate location on map	<u>If Heritage = no Impact - See attached - AR</u>																													
Length of Crossing	_____																													
Mitigation	_____																													
Stabilization	_____																													
Filter Strips	_____																													
Indicate location on map	_____																													
Width (50', 100', or VA)	_____																													

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 Corduroy	OT Other	MU Mud	
LO Landowner	PO Poled	ST Stone		GR Gravel	
OT Other	OT Other	HB Hay Bales		OT Other	
		OT Other			

Forest Products

Products to be Harvested*

Species	MbFCfs		MbBCfs
White Pine	3.8	Red Maple	
Red Pine	149	Sugar Maple	
Pitch Pine		Red Elm	
Hemlock		Black Oak	
Spruce		White Oak	
Other Silv.		Other Silv.	6.2
White Ash		Total MbF	159.1
Beech		Cordwood (Cfs)	41
White Birch		SW Pulp (Tons)	91
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

*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.

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	RP	RP	RP	
Acres	4.2	3.8	3.5	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of CA	SE	SE	SE	
Source of Regeneration	AD	AD	AD	

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.

2-13-19

Signature of landowner(s)

Date

Service Forester

Determination and Status

Approval Disapproved Expires 2/15/21

2-20-19
 Signature of Service Forester/Director's Agent Date

Extension Expires 1 Sec. For. Ints. 1

Amendment App 1 Dis 1 App 2 Dis 2 1

Final Report and Comments

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

9-25-19
 Signature of Service Forester/Director's Agent Date

Codes

Forest Type				Designation of Trees	Type of Cut	Source of Regeneration
WP White Pine	HK Hemlock	OM Mixed Oak	CT Cpl Tree	SH Shelterwood	Intermediate Harvest	AD Advanced
WR White Birch	HM Hemlock	RM Red Maple	LT Long-term Mgt	ST Seed Tree	Conventional Thin	SE Natural Seed
WH White Birch	BC Black Cherry	BF Beech	ST Short-term Har	CC Clear Cut	New Cust Thin	PL Pflm
WO White Oak	BB Beech/RedMap	SP Spruce/Fir	CT Other	SE Selection	Non-Standard Systems*	CO Coppice
RP Red Pine	OH Oak/Hick	SM Sugar Maple	Landowner Objective	SA Salvage	HG Highgrade*	DS Direct Seed
SP Red Spruce	OR N Red Oak	BP Pitch Pine	LT Long-term Mgt	SN Sanitation	DL Diameter Limit*	OT Other
			ST Short-term Har		OT Other	

*IE Other (OT) or a non-standard system is used an explanation must be given on attached narrative page pg 4 of 5

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 DCR - Div. of Water Supply Protection

Town New Salem

File Number _____

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.

The intent of this timber harvest is to fully release advanced regeneration from an overstory of plantation red pine. This is being accomplished by creating three openings, all under five acres, where most of the overstory (red pine) is being removed. Some healthy overstory, mainly native white pine and sawtimber size cavity/denning trees (alive and dead) have been retained for structural complexity and wildlife habitat.

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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Department of Conservation & Recreation
Timber Lot 3158 Located in New Salem - 11.5 acres
Quabbin Reservoir Watershed
Division of Water Supply Protection

300
Feet

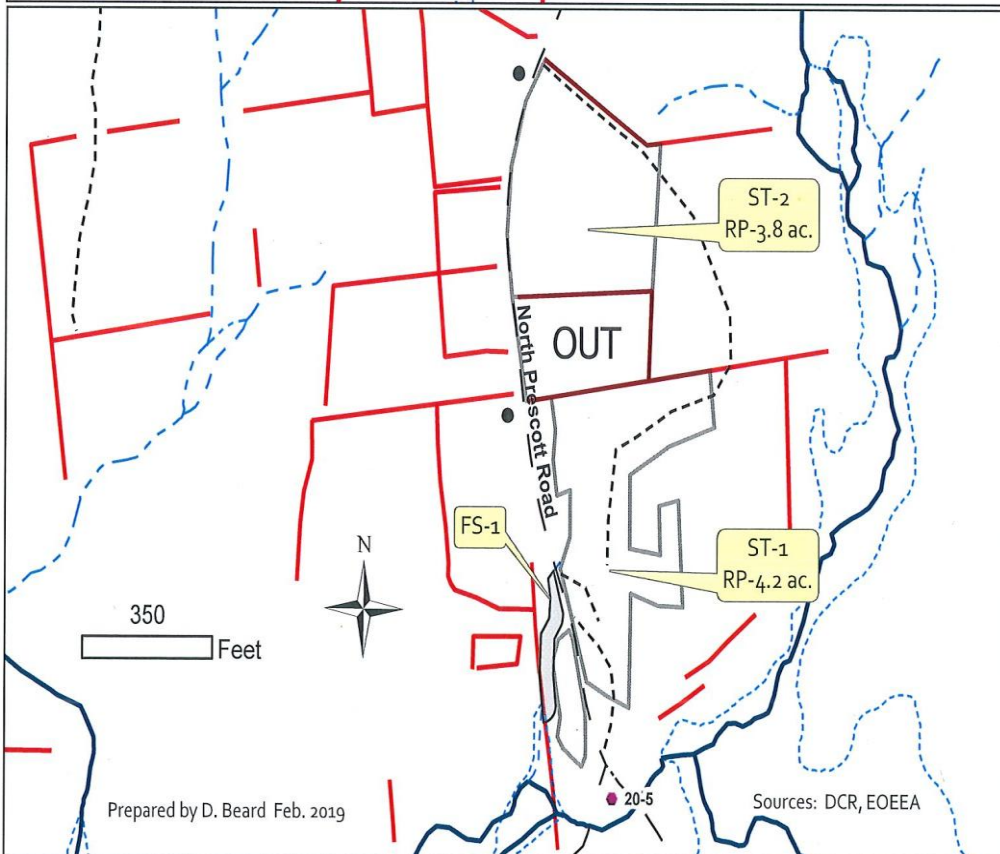
- - Access Road
- ◆ Road Intersection
- Landing
- Harvest Boundary
- - - Skid Road
- ★ Vernal Pool
- - - Intermittent Brook
- Filter Strip

North Prescott Road

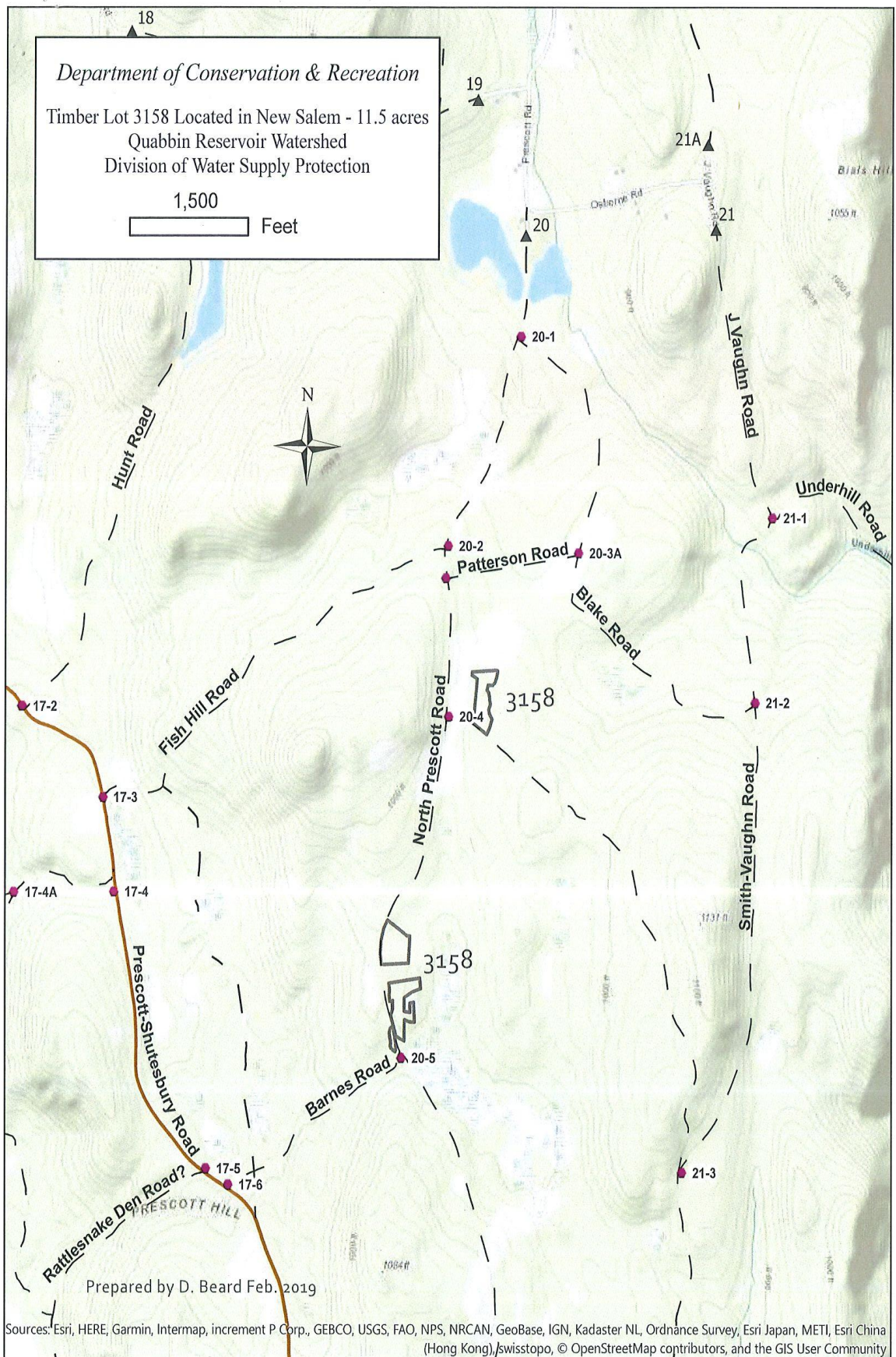
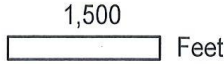
20-4

ST-3
RP-3.5 ac.

FS-2



Department of Conservation & Recreation
 Timber Lot 3158 Located in New Salem - 11.5 acres
 Quabbin Reservoir Watershed
 Division of Water Supply Protection



Prepared by D. Beard Feb. 2019

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



MASSWILDLIFE

**DIVISION OF
FISHERIES & WILDLIFE**

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

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

Cutting Plan No. 204-9779-19
NHESP Tracking No. 19-38384
Town New Salem
Road North Prescott Rd. (Gate 20)
Landowner DCR - Div. of Water Supply Protection
Preparer Derek Beard
Date February 20, 2019

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 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 Rebekah Zimmerer at (508) 389-6354 or Rebekah.zimmerer@state.ma.us.

Sincerely,

A handwritten signature in cursive script that reads "Thomas W. French".

Thomas W. French, Ph.D.
Assistant Director

Cc: New Salem Conservation Commission

MASSWILDLIFE

dcr



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

FILE # 204.9779.19

W

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, Belchertown, MA in accordance with the
(Name of Owner) (Address) 01007

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
N. Prescott Rd lot. (Gak 20), New Salem

Approval Date 2/20/19
Director's Agent Andrew Rawcliffe
ISSUED BY: 

DCR Phone No. 617.549.1677
Priscilla E. Geigis, Director
Division of State Parks and Recreation