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: 3146	
DCR Forest Cutting Plan File Number: 204-8430-17	

Site Information

Watershed: Quabbin	Town(s): New Salem	
Acres: 10	Nearest Road: Route 202, Gate 17	
Natural Heritage Atlas overlap?: Yes	Public Drinking Water Supply Watershed?: Yes	
Forest Types: White Pine, Mixed Oak	ACEC?: No	
Soils: Gneiss and Schist derived well drained till		
Wetland Resources: No		
Vernal Pools present or within 200 feet of harvest?: Yes		

Harvest Information

Harvest Start Date: September, 20, 2016	Harvest End Date: December 7,2018
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Dest management I	uctices 11ppiicu
Stream Crossings	None
Filter Strips	1 filter strip; 100 ft. wide
Wetland Crossings	None
Harvesting in Wetlands	None

DWSP Forester sup	ervising this harvest
Name: Derek Beard	
Forester License # 14	
Phone #: 617-780-0631	
Email: derek.beard@sta	ate.ma.us

NARRATIVE

General Description/Forest Composition/History:

This watershed forest management project covers 10 acres located about mid way down the Prescott peninsula. Specifically it's situated on the east side of Herman Powers Road between the gate 17 and 20 roads (intersections 17-8 and 20-6). The south boundary is Aiken Road, east along a wetland complex, north/northeast along a stone wall and Herman Powers Road to the west.

Fairly large low quality white pine sawtimber is the main forest cover. The southern quarter is a mixture of average quality oak (red, black, white and scarlet) sawtimber. A 1982 thinning triggered a regeneration layer of sapling/pole size black birch, white pine and red maple.

A myriad of adjacent and nearby stone walls coupled with old wire fence along Herman Powers Road suggest the area was pasture before being taken for watershed conservation in the 1920s.

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 and reducing stock of low quality timber are the primary project objectives. This will be accomplished by a two pronged forest management approach. First, a selection harvest consisting of two 2 acre openings situated on the west side of the project furthest from the wetland complex. And second, a shelterwood harvest situated between the openings and east bounding wetland complex. There are two shelterwood sections being 1.5 and 0.5 acres each. The distinct difference between approaches is a shelterwood retains a significant number of overstory trees for seed, shade and/or protection; in this case shade for the adjacent wetland complex while a selection opening retains few if any overstory trees creating a highly stimulus forest regeneration scenario. In this case, the mid sections of both openings have randomly spaced overstory which include vigorous, declining live and dead standing trees. Partially dead and dead standing trees, known as snags, providing forage and cavity nesting/denning opportunity for an array of wildlife.

Cultural Resources:

The project area is home to several small quarries/barrow pits adjacent to the wetland complex.

Wildlife/Rare or Endangered Species:

The east side of the project area is bound by water resources that include a beaver pond, wetland, a vernal pool and an intermittent brook. Vernal pools are important habitat for a variety of salamanders as well as invertebrates like the fairy shrimp. In addition, the area overlaps with a natural heritage endangered species bubble.

FIGURES

Figure 1. Forest Cutting Plan

Figure 2. Pre-Harvest & Post Harvest Photographs, A-B

10-19-16A09:25 RCVD For DCR Use Only: Forest Cutting Plan 204-8430-17 Case No. File Number 10/4/16 Nat. Hert. and Notice of Intent under M.G.L. Date Rec'd Earliest Start 11/2/16 Nat. Hert. Imp. _No Chapter 132 - The Forest Cutting Chicopee Quabbin Pub. Dr. Wat. River Basin Practices Act, 304 CMR 11.00 LT ACEC Gen. Obj. (Effective Date: 1/1/04) Landowner Location Timber Lot 3146 DCR - Division of Water Supply Protection New Salem Town Herman Powers Rd. (Inside Gate 17) Mailing Address 485 Ware Rd. Proposed Start Date Acres 10 Vol. MBF 65.7 Vol. Cds. 24 Vol. Tons 294 Town, State, Zip Belchertown, MA 01007 Phone 412-323-6921 Ch61 61A 61B Stew *Case # Plan Preparer CR CR Holder ம Name Derek Beard Licensed Timber Harvester** DCR - Div. of Water Supply Protection Address Name Chris Pirner Loggins 21 Elm St. Address 152 Williamsville Rd Town, State, Zip New Salem, MA 01355 Town, State, Zip Hubbardston, MA 0143 2 978-544-6343 978-270-9916 Phone Type of Preparer LF Mass. Lic. Harvester # 587 *Mass. Forester License # 14 **This information may be supplied after the plan is approved, but before *Required for land under Ch61, Ch61A or Forest Stewardship work begins. Harvesting in Wetlands **Stream Crossings** SC-2 Indicate location on map HW-2 HW-3 HW-4 SC-4 HW-1 Indicate location on map Type of Crossing Forest Type (see pg 2) Acres to be Harvested **Existing Structure** Resid. Basal Area Type of Bottom (>50%?) Bank Height (ft) Stabilization Management Service Forester Comments Wetland Crossings WC-2 WC-3 WC-4 WC-1 Indicate location on map Length of Crossing Mitigation Stabilization Filter Strips Indicate location on map FS-1 FS-2 FS-4 Width (50', 100', or VA) Type of Bottom LE Ledge ST Stony Type of Preparer
LF Mass. Lic. For.
TH Lic. Tim. Har Type of Crossing
CU Culvert
BR Bridge Stabilization Mitigation SE Seed MU Mulch Frozen 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 FO Ford PO Poled CO Corduroy ST Stone MU Mud Timber Buyer OT Other pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information Gravel LO Landowner HB Hay Bales OT Other OT Other OT Other

Products to be Harvested*Timber Lot 3146

Species	Mbf/Cds	71747	Mbf/Cds
White Pine	61	Red Maple	1.9
Red Pine	ACEC	Sugar Maple	(MC) 1662
Pitch Pine		Red Oak	- 12.0
Hemlock		Black Oak	1.3
Spruce		White Oak	IS.
Other Sftwd.		Other Hdwd.	.6
White Ash	pY to nels	Total Mbf	65.7
Beech	Pare Rel.	Cordwood (Cds)	24
White Birch		SW Pulp (Tons)	294
B & Y Birch	.9	HW Pulp (Tons)	101
Black Cherry	1580-FS	Chips (Tons)	143

*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

2	
	Indicate
Ę	Forest T
Ĭ	Acres
1	Landow
2	Designat
3	Type of
3	Course

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WP	WP	WP	WP
Acres	2	2	.5	1.5
Landowner Objective	LT	ISM LT	LT	LT
Designation of Trees	CT	CT	СТ	CT
Type of Cut	SE	01 SE	SH	SH
Source of Regeneration	SE/AD	SE/AD	SE/AD	SE/AD

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 specie

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.

de Shall	10-13-16
Signature of landowner(s)	Date (11 at a table) and

0.5	
Determination and Status 204-8430-17	Final Report and Comments
Approved Disapproved Expires Cutting Plan	I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.
Signature of Service Forester/Director's Agent Date	Signature of Service Forester/Director's Agent Date
Extension 1 2 2 / Ser. For. Ints.	स्थायत प्रशास 🔘
App 1 Dis 1 App 2 Dis 2 Amendment	E-23 E-21 T-21 Gold to an automorphism 1 1 1 1 1 1 1 1 1
Forest Types WP White Pine WK WP/Hem HH Hem/Hdwd RM Red Maple WH WP/Hdwd BC Blck Cherry WO WP/Oak RP Red Pine OH Oak/Hdwd SM Sugar Maple Designation of Trees CT Cut Tree LT Leave Tree SB Stand Boundary OT Other OH Oak/Hdwd SM Sugar Maple	Type of Cut

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

Sanitation

Diameter Limit

DI

OR N Red Oak PP Pitch Pine

SR Red Spruce

OT Other

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 3146

Landowner

DCR-DWSP-Quab

Town

New Salem

File Number

204-8430-17

equivelant to	at least 5 square feet o	f basal area per acre. Openings are marke	ed blue. There are two shelterwood sta	ands separated by
un-harvested	d forest. These stands h	ave 60 square feet of residual basal area a	nd are marked orange. Landing and s	kid roads are marked both
blue and orar	nge. There are 4 acres of	of un-harvested or original condition fores	t.	
Use t	this Section to describe	the types of trees to be harvested and/or r in the Stand Treatment Sec		esignation of Trees"
Stand No.	Species to be Cur	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Remove
			_	
=				
=		escribe how Chapter 132 requirements wi as used for the "Type of Cut" in the Cutti		i, DL, or OT)
Stand No.		as used for the "Type of Cut" in the Cutti How will Regeneration be obtain If using AD - Describe the species	ng Standards Section on page 4.	l be protected
Stand No.	Source of Regeneration	as used for the "Type of Cut" in the Cutti How will Regeneration be obtain If using AD - Describe the species	ng Standards Section on page 4. med/protected? present and how the regeneration will	l be protected
Stand No.	Source of Regeneration	as used for the "Type of Cut" in the Cutti How will Regeneration be obtain If using AD - Describe the species	ng Standards Section on page 4. med/protected? present and how the regeneration will	l be protected
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	Source of Regeneration	as used for the "Type of Cut" in the Cutti How will Regeneration be obtai If using AD - Describe the species If using SE - Describe the source	ng Standards Section on page 4. med/protected? present and how the regeneration will f the seed and the number of seed tree	l be protected
Stand No.	Source of Regeneration (ex. AD, SE)	as used for the "Type of Cut" in the Cutti How will Regeneration be obtain If using AD - Describe the species	ng Standards Section on page 4. ned/protected? present and how the regeneration will of the seed and the number of seed tree	l be protected es/acre
	Source of Regeneration (ex. AD, SE)	as used for the "Type of Cut" in the Cutti How will Regeneration be obtain If using AD - Describe the species If using SE - Describe the source Describe the source	ng Standards Section on page 4. ned/protected? present and how the regeneration will of the seed and the number of seed tree	l 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	204-8430-17
NHESP Tracking No	16-36186
Town	New Salem
Road	Herman Powers Road
Landowner	DCR - DWSP
Preparer	Derek Beard
Date	November 28, 2016

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 (hereinafter "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.

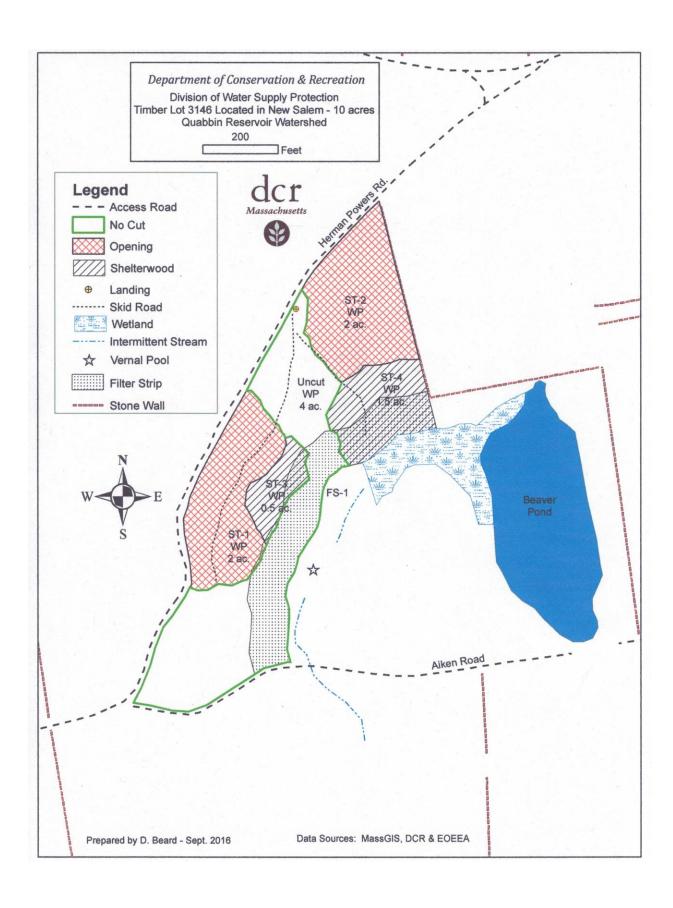
Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact Brent Powers at (508) 389-6354 or brent.powers@state.ma.us.

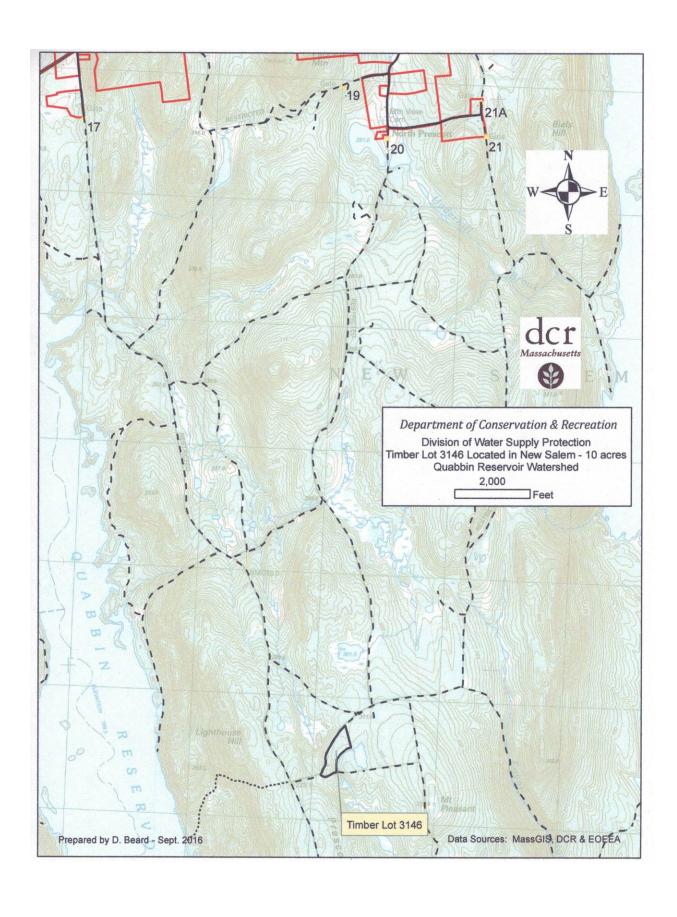
Sincerely,

Cc:

Thomas W. French, Ph.D. Assistant Director

New Salem Conservation Commission (via e-mail)





COMMONWEALTH OF MASSACHUSETTS

Department of Conservation and Recreation Division of State Parks and Recreation



FOREST CUTTING PLAN CERTIFICATE

Relchertown in accordance with the Post this in a conspicuous place within the area in which the harvesting operation is to take place.

This certifies that DCR Coverbin (Name of Owner)

(Address)

with the Dept. of Conservation

and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the 3146 lot. provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst

Approval Date 11-1-2016

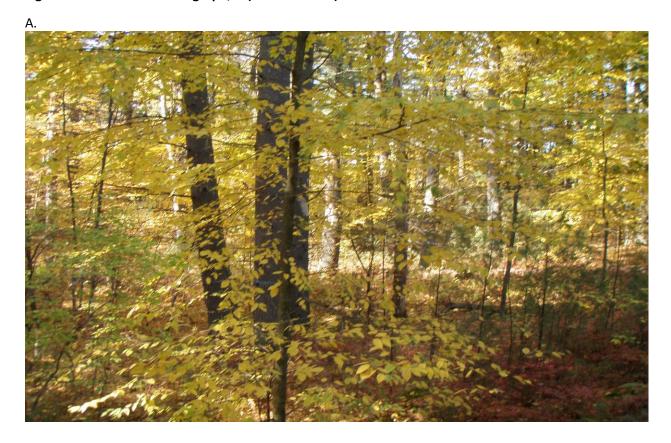
Director's Agent FLETCHER CLARK

DCR Phone No. 413 - 261-2367

ISSUED BY:

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

Figure 2: Pre-Harvest Photograph, A (October 2016)



Post-Harvest Photograph, A (June 2017)



After one year of growth, A (July 2018)



Pre-Harvest Photograph, B (October 2016)



Post-Harvest Photograph, B (October 2017)



After one year of growth Photograph, B (July 2018)

