

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: 3149
DCR Forest Cutting Plan File Number: 204-8837-17

Site Information

Watershed: Quabbin Reservoir	Town(s): New Salem
Acres: 52	Nearest Road: Hunt, Gate 18
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: June 28, 2017	Harvest End Date: June 28, 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 #: 978-544-6343
Email: derek.beard@state.ma.us

NARRATIVE

General Description/Forest Composition/History:

This watershed forest management project covers 52 acres amid the north end of the Prescott peninsula in New Salem. Specifically it's situated between Hunt Road (Gate 18) and North Prescott Road (Gate 20). It is bounded to the south by the height of land, west by stone wall, north by stone wall and height of land and east by talus slope.

The majority of the project (45 acres) covers a moderate north/northwest facing slope growing, a somewhat blocky pattern of, sawtimber white pine. Between the blocks of pine are pole and sawtimber black birch and red oak sawtimber. The pole size birch developed from an improvement harvest completed in the early 1980s. The remaining project area (7 acres) covers a northeast oriented finger growing sawtimber and pole size red oak.

The 45 acre section of the project encompasses what is historically known as the New Salem poor farm. Common throughout colonial New England, these were designated sections of town where landless residents or indebted farmers could raise crops and/or livestock. Typically, a portion of the harvest would be shared with other residents. Given the rich agrarian history, there are many stonewalls, which account for some of the blocky forest pattern. It's also likely the reason for the presence of a fairly old sugarbush. This is an area growing sugar maple trees that are tapped for the production of maple syrup. It's likely that this sugarbush has been tended for centuries, and still is, as part of Quabbin's sugar maple tapping program.

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 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 forest 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 14 openings ranging between 0.3 and 1 acre with an average of 0.6 acres. Openings greater than 0.5 acres have retention trees which will add to future forest complexity.

Cultural Resources:

As mentioned above, the area has a rich agrarian history evidenced by many stone walls. Adjacent to the west harvest boundary are several cellar holes.

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.

Adjacent to the north harvest boundary is a vernal pool; a seasonal wetland that provides breeding habitat for amphibious and invertebrate fauna.

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

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

Figure 1: Forest Cutting Plan

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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 Use Only:

File Number <u>204-8837-17</u>	Case No. _____
Date Rec'd <u>5/26/17</u>	Nat. Hert. <u>Yes /</u>
Earliest Start <u>6/13/17</u>	Nat. Hert. Imp. <u>No</u>
River Basin <u>Chicopee</u>	Pub. Dr. Wat. <u>Quabbin</u>
Gen. Obj. <u>LT</u>	ACEC <u>NO</u>

Location Timber Lot 3149

Town New Salem

Road North Prescott Rd. (Gate 20)

Acres 52 Proposed Start Date _____

Vol. MBF 100.8 Vol. Cds. 144 Vol. Tons 278

Plan Preparer

Name Derek Beard

Address DCR – Div. of Water Supply Protection
21 Elm St.

Town, State, Zip New Salem, MA 01355

Phone 978-544-6343

Type of Preparer LF

*Mass. Forester License # 14

*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR – Division of Water Supply Protection

Mailing Address 485 Ware Rd.

Town, State, Zip Belchertown, MA 01007

Phone 412-323-6921

Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ *Case # _____

CR ☐ CR Holder _____

Licensed Timber Harvester**

Name _____

Address _____

Town, State, Zip _____

Phone _____

Mass. Lic. Harvester # _____

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

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing				
Existing Structure				
Type of Bottom				
Bank Height (ft)				
Stabilization				

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)	50'	50'		

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

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
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

Note:
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.

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

Products to be Harvested* Timber Lot 3149

Species	MbD/Cds		MbD/Cds
White Pine	64.8	Red Maple	4.5
Red Pine		Sugar Maple	0.9
Pitch Pine		Red Oak	6.4
Hemlock		Black Oak	1.7
Spruce		White Oak	0.6
Other Sched.		Other Sched.	
White Ash	7.0	Total MbF	100.8
Beech		Cordwood (Cds)	144
White Birch	0.4	SW Pulp (Tons)	218
H & Y Birch	13.9	HW Pulp (Tons)	
Black Cherry	0.7	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	WO	OK		
Acres	45	?		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SE	SE		
Source of Regeneration	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 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.

Signature of landowner(s)

Date

Determination and Status

Approved ☒ Disapproved ☐ Expires 5/26/19

Cutting Plan 204-8837-17 6/14/2017

Signature of Service Forester/Director's Agent _____ Date _____

Extension ☐ ☐ Expires _____ Sec. Tit. Int. _____

Amendment ☐ ☐ ☐ ☐ _____

Final Report and Comments

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

Signature of Service Forester/Director's Agent [Signature] Date 6-7-19

Comments
Suggest use of (Prescribed Fire) to remove herbaceous ground cover at or near (0.5/1.0 tons) to facilitate the regrowth to maintain Ch 32 Tree Regrowth Requirements in a Five year span post harvest.

Forest Type	HK	Hemlock	DM	Mixed Oak	CT	Oak Tree	Type of Cut	Tabernash Harvest	Source of Regeneration
WP White Pine	HH	Hem/Oak	RM	Red Maple	LT	Leafy Tree	SH	Shelterwood	AD Advanced
WK WP/Kem	BC	Black Cherry	RE	Beech	SL	Stand Boundary	ST	Seed Tree	SE Natural Seed
WH WP/Hem	BR	Beech/Maple	SE	Spruce/Fir	OT	Other	LC	Clear Cut	PL Plant
WO WP/Oak	CH	Chickadee	SM	Sugar Maple	Landowner Objective		SE	Selection	OO Coppice
RP Red Pine	OR	N Red Oak	PP	Pitch Pine	LT	Long-term High	SA	Savage	DS Direct Seed
SH Red Spruce					ST	Short-term High	SA	Selection	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 3149

Landowner DCR-DWSP-Quab

Town New Salem

File Number 204-8837-17

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.

This harvest is an aggregation of 14 canopy openings (patches) spread across 52 acres. Opening size ranges from 0.3 to 1.0 acre with an

average of 0.7 of an acre. The openings cover a total of 10 acres. Openings greater than 0.5 acres have a minimum of 5 square feet of

residual basal area also known as green tree retention. Retention also includes wildlife trees a.k.a. snags which can be dead or alive.

Trees to be harvested in openings are marked with blue paint. Trees within 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.

Stand No.	Species to be Cut	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Removed

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

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



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

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

Jack Buckley, Director

Fletcher Clark - Department of Conservation and Recreation
40 Cold Storage Drive
P.O. Box 484
Amherst, MA 01004

Cutting Plan No.	204-8837-17
NHESP Tracking No.	17-36834
Town	New Salem
Road	North Prescott Road
Landowner	DCR - DWSP
Preparer	Derek Beard
Date	June 19, 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.

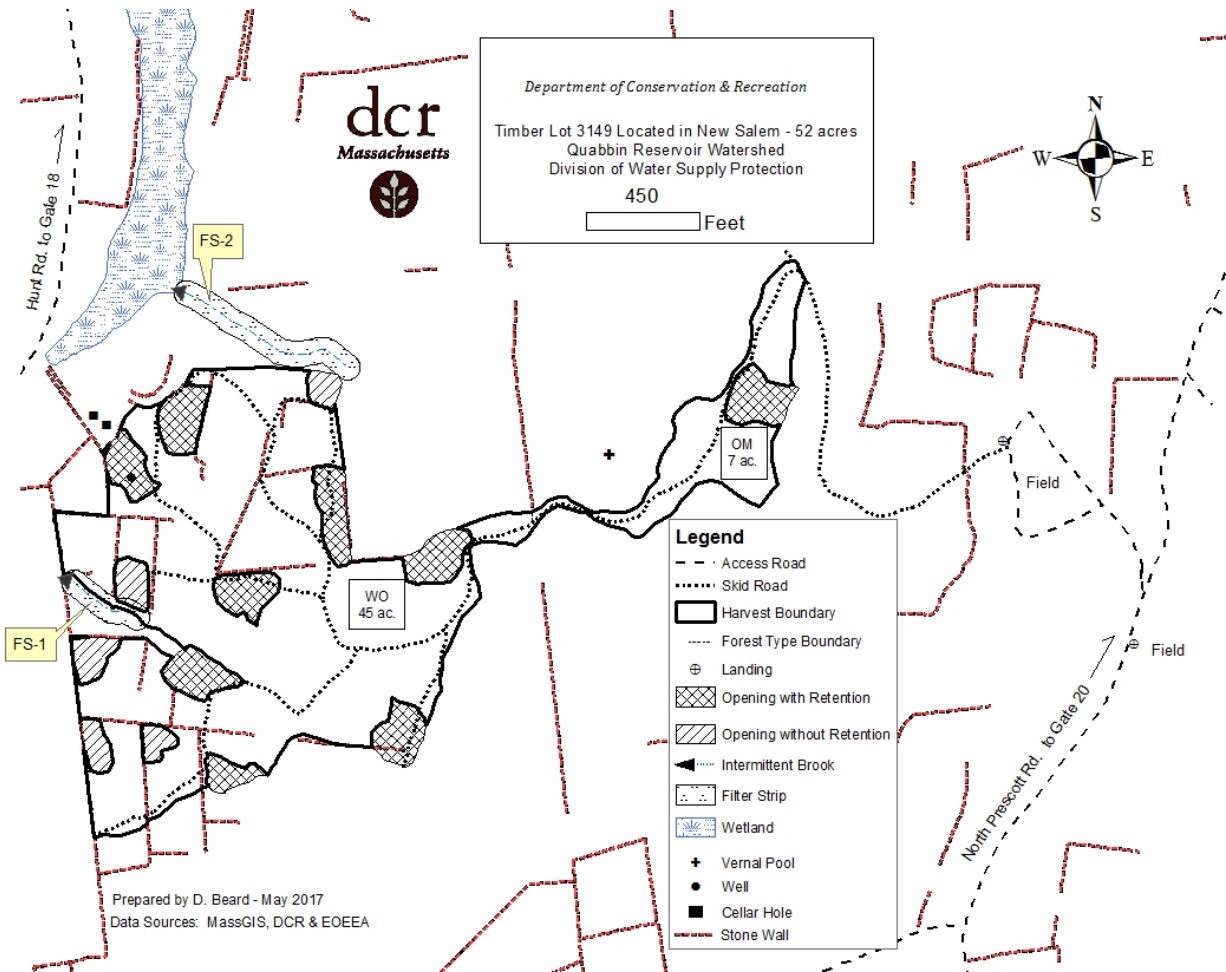
Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact Brent Powers at (508) 389-6354 or brent.powers@state.ma.us.

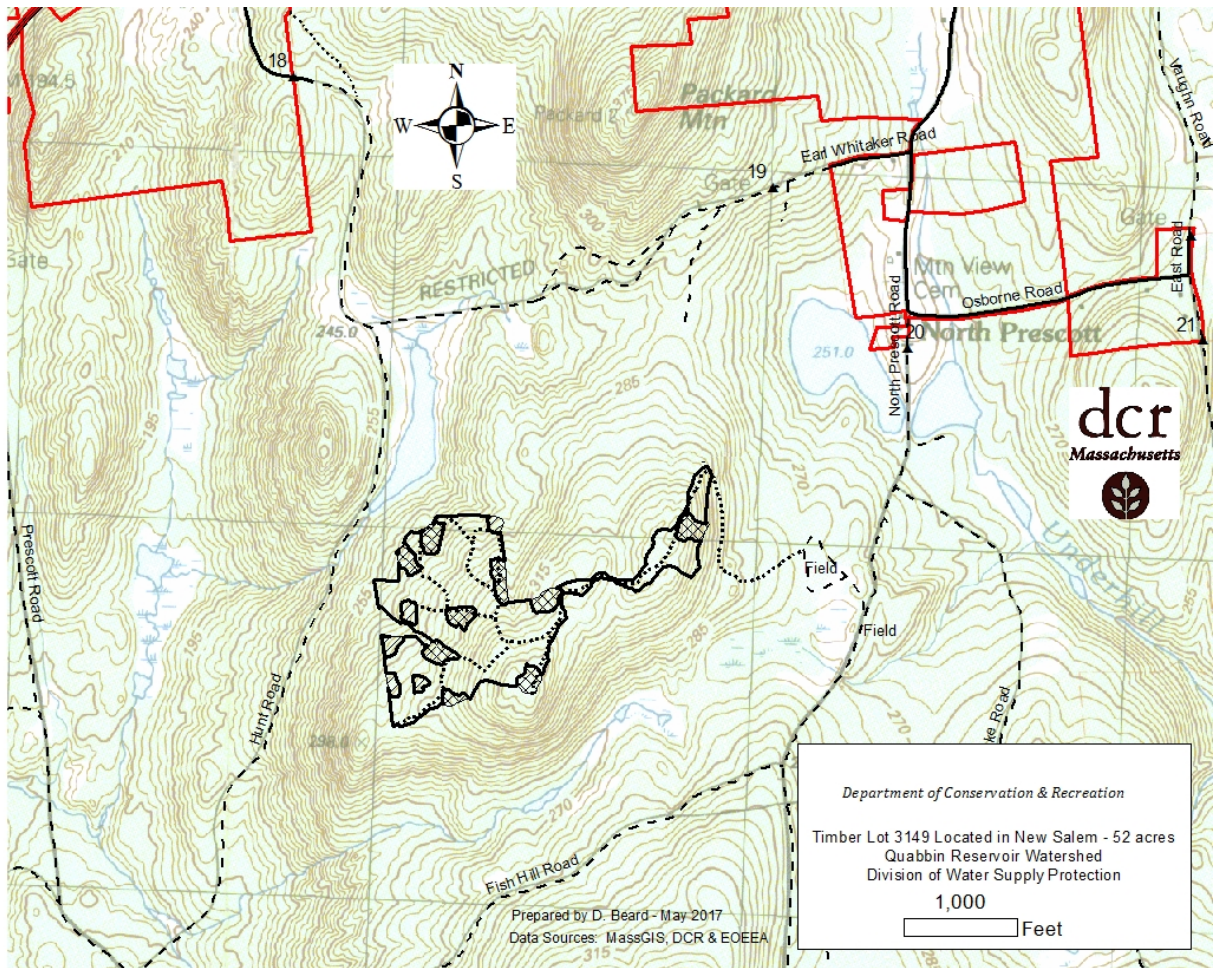
Sincerely,

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 # 204.8837.17

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)

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. (3149)
(GATE 20)

Approval Date 6/19/17

Director's Agent FLETCHER CLARK

DCR Phone No (413) 262-2367

ISSUED BY:

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

Figure 2: Pre-Harvest Photographs, A-B (June 2017)

A.



Dense seedling layer of sugar maple

A. Post-Harvest Feb. 2019



A. One year of growth Sept. 2019



A. Two years of growth July 2020



A. Three years growth, June 2021



B. Pre-Harvest, June 2017



Red oak overstory with sapling/small pole size black birch beneath

B. Post-Harvest, June 2019



B. One year of growth, Sept. 2019



B. Two years of growth, July 2020



B. Three years of growth, June 2021

