Massachusetts Department of Conservation and Recreation Division of Water Supply Protection, Office of Watershed Management

Forest Management Project Summary

Project Title: Lighthouse Hill North DWSP Harvest Permit Number: 3180

DWSP Proposal ID: PR-25-13

DCR Forest Cutting Plan File Number: 204-43319-26

Site Information

Watershed: Quabbin Town(s): New Salem

Acres: 12

Nearest Road: Cooleyville

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: White Pine, White Pine/Oak and Mixed Oak Dry Site

ACEC?: No

Soils: Stony till with varying levels of sandy loam

Wetland Resources: The project area contains no wetland resources but is adjacent to some on

the east side. Vernal Pools: 0

Harvest Information

Harvest Start Date:TBD

Harvest End Date: Before 12/13/2027 Number of Wetland Crossings: 0 Number of Stream Crossings: 0

Best Management Practices Applied

Stream Crossings: 0

Filter Strips: 0

Wetland Crossings: 0 Harvesting in Wetlands: 0

DWSP Forester supervising this harvest

Name: Derek Beard Forester License #: 14 Phone #: 617 780 0631

Email: derek.beard@mass.gov

NARRATIVE

General Description/Forest Composition/History:

Located on the west side of Prescott Road (Gate 17 Rd.) the project encompasses the north ridge/slope of Lighthouse Hill. The harvest's log landing is approximately one quarter mile (0.25) north of intersection 17-8. The harvest covers 12 acres of a 77-acre management area bounded to the east by stone wall, wetland and intermittent brook, south by old farm lane, west by steep slope and north by stone wall.

The area is dominated by tall, large diameter white pine of average to below average quality. Growing amongst the pine are oaks (red, black, white and scarlet) black birch, red maple and hemlock. Portions of the area were thinned in the 1970s and 80s.

Sporadic fire is part of the area's ecological history evidenced by scarring/cavities at the base of oaks and scattered presence of fire adapted pitch pine. Stone walls and barbed wire bear out a past landscape dominated by agriculture.

Site Selection:

One goal of public water supply management is to maintain forests that protect high quality drinking water for current and future users. To achieve this, DWSP has determined the forest should contain a diversity of species in various stages of development (seedlings through large legacy trees). This requires active forest management designed to foster health, regeneration and greater complexity. Forest in this condition is well positioned to bolster inherent resiliency and ameliorate impacts from a range of disturbances (disease, insect infestation, ice storms and hurricanes) brought on by a warming planet.

Silvicultural Objectives:

The main goal of the harvest is introducing some structural diversity to a largely homogeneous tall canopy forest. This will be accomplished by harvesting twelve one-acre openings placed across the area, that once exposed to direct sunlight will trigger vigorous seedling/sapling regeneration. All openings have legacy trees along with snags (live and dead trees that exhibit signs of wildlife use, i.e. cavities, nests, dens) that support important ecosystem function.

Cultural Resources:

The project does not encompass any extraordinary cultural resources.

Rare or Endangered Species:

According to the latest edition of the MA Natural Heritage & Endanger Species Atlas, the project overlaps with estimated or critical habitat area. The NHESP Program review determined that the proposed plan will not negatively impact Priority Habitat or result in Take (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act.

FIGURES

Figure 1. Forest Cutting Plan

apter 132 – The Fo actices Act, 304 CM					Date Rec'd O8. 07.25 Earliest Start O8. 22.25 River Basin Chaupee	_ ACEC		n/a	
ective Date: 3/15/16)	Thursday to		farmous isonomia						******
Location Timber Lot 3180					Landowner				
Town New Salem					Nama DCR - Div o	of Water S	upply Dr	rotaction	
Road Prescott Road (Gate 17)					Name DCR - Div. of Water Supply Protection Mailing Address 485 Ware Rd.				
Acres 77	Propo	osed Star	t Date		Training Traditions 100	rraio i ta.			
Vol. MBF 176 Vo	ol. Cds	118	Vol. Ton	333	Town, State, Zip Belo	hertown,	MA 010	07	
					and the second second second	23-6921			
Plan Preparer					Ch61 61A 61B Stew *Case #				
Acceptable in the Control of the Con					FSC 🗌 CR 🔲 CR	Holder			
Name Derek Beard					Licensed Timbe	u Hamia	stouk X	k	
Address 485 Ware Rd.					Licensed minue	naive	Ster		
					Name				
Town, State, Zip Belchertown, MA 01007					Address				
	80-0631	1			Town, State, ZipPhone				
Type of Preparer Licen		ter	***************************************		Mass, Lic. Harvester #				
*Mass, Forester License *Required for land unde	er Ch61, Cl	h61A or	Forest St	ewardship	**This information may be work begins. Harvesting in	supplied after		approved, i	out be
	er Ch61, Cl	h61A or	Forest St	ewardship		supplied after		approved, i	out be
*Required for land unde	er Ch61, Cl	h61A or SC-2	Forest St	ewardship SC-4	Work begins. Harvesting in Vindicate location on map	supplied after		HW-3	
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*Required for land under Stream Crossing Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossing Indicate location on map	SC-1	SC-2	SC-3	SC-4	Indicate location on map Forest Type (see pg 2) Acres to be Harvested Resid. Basal Area (>50%?)	Wetland	ds	HW-3	
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*Required for land under Stream Crossing Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossin Indicate location on map Length of Crossing Mitigation Stabilization Filter Strips	SC-1 SC-1 WC-1	SC-2	SC-3	SC-4	Indicate location on map Forest Type (see pg 2) Acres to be Harvested Resid. Basal Area (>50%?)	Wetland	ds	HW-3	
*Required for land under Stream Crossing Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft) Stabilization Wetland Crossing Indicate location on map Length of Crossing Mitigation Stabilization Filter Strips Indicate location on map	SC-1	SC-2	SC-3	SC-4	Indicate location on map Forest Type (see pg 2) Acres to be Harvested Resid. Basal Area (>50%?)	Wetland	ds	HW-3	
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White Pine

WK WP/Hem WH WP/Hdwd

WP/Oak

Red Spruce

Products to be Harvested* *Note: Volumes and values indicated in the Plan are as reported by the plan preparer and have not been independently verified Mbf/Cds Mbf/Cds by the service forester upon approval. Mbf = thousand board feet. Species 117,000 White Pine Red Maple 4.000 Cutting Standards Red Pine Sugar Maple Pitch Pine Red Oak 15.000 Hemlock 16,000 Black Oak 8.000 Indicate location on map ST-1 ST-2 ST-3 ST-4 Spruce White Oak 3.000 OM HH WO Forest Type Other Sftwd. Other Hdwd. 2.000 7.000 5.000 65.000 Acres White Ash 3.000 Total Mbf 176,400 Landowner Objective LT LT LT Beech Cordwood (Cds) 118,000 Designation of Trees CT CT CT White Birch SW Pulp (Tons) SE 0.400 333.000 Type of Cut CC CC B & Y Birch 8.000 HW Pulp (Tons) 0.000 Source of Regeneration AD SE SE Black Cherry Chips (Tons) 0.000**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. X LT – Long-term Forest Management ST - Short-term Harvest Harvest of trees with the main intention of producing Planned management of the forest to achieve one or more of the short-term income with minimal consideration given to following objectives: produce immediate and maximize long-term income, enhance wildlife habitat, improve recreational opportunities, improving the future forest condition, which often results protect soil and water quality, or produce forest specialty products. 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. Date Signature of landowner(s) Final Report and Comments **Determination and Status** Disapproved Expires I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with. 08/07/2027 **Cutting Plan** \mathbf{X} 09/15/2025 Signature of Service Forester/Director's Agent Date Signature of Service Forester/Director's Agent Date Heritage: No Impact. See attached. Expires Ser. For. Ints. Extension 1 2 Amendment Source of Regeneration Intermediate Harvests: AD Advanced Type of Cut Forest Types Designation of Trees

SH

Shelterwood

CT Commercial Thin NT Non Com Thin

Non-Standard Systems:

Highgrade* Diameter Limit*

SE Natural Seed PL Plant

CO Coppice DS Direct Seed OT Other

Seed Tree Clear Cut

Selection

Salvage

Cut Tree

OT Other

Leave Tree Stand Boundary

Mixed Oak

Spruce/Fir Sugar Maple

Pitch Pine

RM Red Maple BE Beech

Hemlock

Hem/Hdwd

Blck Cherry

Bee/Bir/Map

N Red Oak

-Oresi

Products to be Harvested* *Note: Volumes indicated in the Plan are as reported by the plan preparer and have not been independently verified Species Mbf/Cds Mbf/Cds by the service forester upon approval. Mbf = thousand board feet. White Pine 117 Red Maple Red Pine Sugar Maple **Cutting Standards** Pitch Pine Red Oak 15 Hemlock 16 Black Oak 8 Indicate location on map ST-1 ST-2 ST-3 Spruce White Oak 3 OM THH T Forest Type WO 🔄 Other Sflwd. Other Hdwd. 2 Acres White Ash Total Mbf 176.4 Landowner Objective LT LT LT ▼ CT ▼ SE Beech Stand Cordwood (Cds) 118 Designation of Trees CT ~ CT White Birch **⊡** CC 0.4 333 Type of Cut CC SW Pulp (Tons) B & Y Birch HW Pulp (Tons) Source of Regeneration AD **y** SE 8 Black Cherry Chips (Tons) 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 ST - Short-term Harvest Planned management of the forest to achieve one or more of the Harvest of trees with the main intention of producing short-term income with minimal consideration given to following objectives: produce immediate and maximize long-term improving the future forest condition, which often results income, enhance wildlife habitat, improve recreational opportunities, in a forest dominated by poor quality and low value species. protect soil and water quality, or produce forest specialty products. 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. Signature of landowner(s) Date **Final Report and Comments Determination and Status** I hereby certify that the afore described Forest Cutting Plan Disapproved Expires Approved and all relevant statutes have been substantially complied with. **Cutting Plan** Signature of Service Forester/Director's Agent Date Signature of Service Forester/Director's Agent Ser. For. Ints. 1 Extension 2 App 2 Dis 1 Dis 2 Amendment Forest Types White Pine WP/Hem Designation of Trees CT Cut Tree LT Leave Tree SB Stand Boundary Source of Regeneration

Other Landowner Objective LT Long-term X.t. Shelterwood

Seed Tree Clear Cut

Selection Salvage

Sanitation

ST

Intermediate Harvests:

Commercial Thin Non Com Thin

Non-Standard Systems:* HG Highgrade*

Diameter Limit

CT NT

Hemlock Hem/Hdwd

Blek Cherry

Bee/Bir/Map Oak/Hdwd

N Red Oak

BC

BB

WK WH

WP/Hdwd

Red Spruce

WO WP/Oak RP Red Pine SR Red Spru

OM Mixed Oak

Beech

Spruce/Fir

Sugar Maple

RM Red Maple

BE

SF

PP

AD Advanced SE Natural Seed PL Plant

CO Coppice DS Direct Seed OT Other

Designation of Ti

Forest Cutting Plan Landowner DCR -DWSP Narrative Page (Effective Date: 3/15/16) New Salem Town Use this page to provide further explanation or if File Number 204-43319-26 Other (OT) was used in any category on pages 3 or 4. 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 harvest intent is diversification of forest structure. Specifically, introducing young forest into a largely homogeneous 80 to 400 year old forest. This will be accomplished through twelve openings spread across a 77 acre management unit. Openings range between slightly below and above one acre. Per regulation, openings over one acre are classified as clearcuts and under one acre as selection cuts (group). To simplify the cutting plan filing process, stands with openings both above and below the one acre criteria are classified as clearcuts. All openings have remaining live trees (marked green or orange) and wildlife snags (marked with a W). Bounds of openings are marked with triple slash of green of orange. Timber to be cut is marked blue. Main skid roads are marked with vertical blue slash. 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. % BA/AC Describe Trees to be Left Describe Trees to be Cut Stand No. Quality Size Species 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 How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected Regeneration

Stand No. Source of Regeneration (cx. AD, SE)

Stand No. 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.

Describe the source of the seed and the number of seed trees/acre

Stand No.

Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory

Figure 1d: Forest Cutting Plan pg. 5.

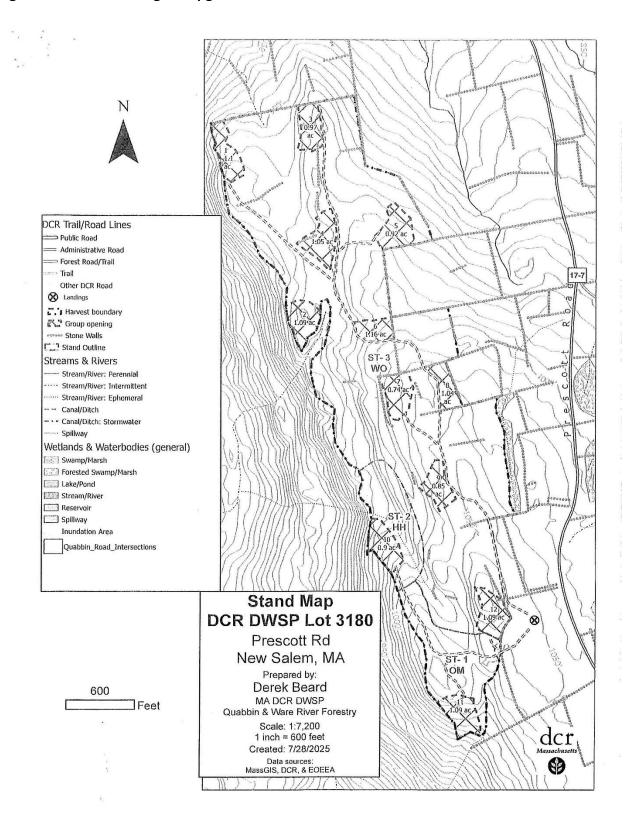


Figure 1e: Forest Cutting Plan page 6.

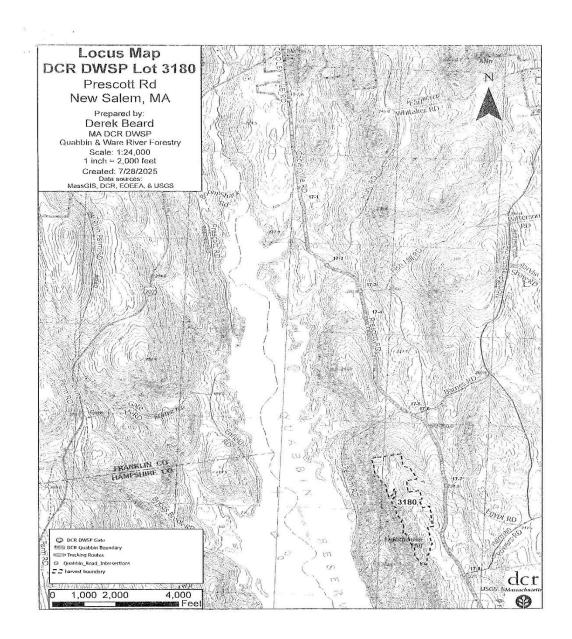


Figure 1f: Forest Cutting Plan page 7

