

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

Project Title: Lot 5280

DWSP Harvest Permit Number: 5280

DWSP Proposal ID: WA-19-62

DCR Forest Cutting Plan File Number: 282-9797-19

Site Information

Watershed: Wachusett

Town(s): Sterling

Acres: 30

Nearest Road: Prescott Street/Bean Road

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: Mixed oak, Oak hardwood

Area of Critical Environmental Concern (ACEC)?: No

Soils: The excessively drained soil is the Hinckley sandy loam making up 26%. The well drained thick soil is the Paxton fine sandy loam, very stony making up the other 74%.

Wetland Resources: None

Vernal Pools: None known.

Harvest Information

Harvest Start Date: 3/27/2019

Harvest End Date: 6/30/2021

Number of Wetland Crossings: None

Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings: There are no stream crossings.

Filter Strips: There is no harvesting in the filter strips.

Wetland Crossings: There are no wetland crossings.

Harvesting in Wetlands: There is no harvesting in wetlands.

DWSP Forester supervising this harvest

Name: Greg Buzzell

Forester License number: 025

Phone number: 774-261-1841

Email: greg.buzzell@mass.gov

Narrative

General Description/Forest Composition/History

The overstory is a fairly standard dry-site mix of black, red and white oaks along with white pine and the occasional hickory and red maple. There is more white pine in the lower elevations, especially in the southwestern quadrant of this area. A fire several decades ago, probably caused by a fisherman on the Stillwater Basin shoreline, spread most of the way up this west-facing slope. There are many trees with fire-scars that persist to the present day. There is decent advance regeneration especially in the southern half of the area. The regeneration is comprised of white pine, red oak, white oak, black oak, red maple, hickory and eastern hophornbeam. The understory also has native shrubs such as maple-leaved viburnum (showing signs of deer browse), huckleberry, lowbush blueberry and mountain laurel. There is also witch-hazel at lower elevations. The mountain laurel is scattered in much of the area but reaches interfering levels in the northwest quadrant from about mid-slope down to the bottom of the hill as the Stillwater Basin.

Site Selection

The ideal watershed protection forest is one which best serves the function of the land as a producer of high-quality drinking water in both short- and long-term. This forest must be vigorous and diverse in tree species and ages, be actively accumulating biomass and actively regenerating. Such a forest will be ideally suited to be resilient to and quickly recover from small- and large-scale disturbances such as diseases, insect infestations, ice storms and hurricanes.

Silvicultural Objectives

The goal will be to establish a new age class on 1/3rd (10 acres) of this working unit by the removal of the overstory in patches. These will be as well distributed throughout the area as possible taking advantage of the advance regeneration. Some thinning may occur between the openings primarily aimed at removing the trees of poorest health. These are likely to be some of the badly fire-scarred trees.

Cultural Resources

None known.

Rare or Endangered Species

NHESP has determined that certain state-listed sensitive species or habitats may exist within the lot proposal area. To protect them from unnecessary disturbance, detailed information regarding affected species and their locations is not included in this report. DWSP will coordinate with NHESP and follow recommendations to protect these species during the proposed activity.

Figures

- Figure 1. Forest Cutting Plan
- Figure 2. Maps of harvest area showing approximate boundary, proposed openings and other features
- Figure 3. General locus map showing the location of the proposed timber harvest
- Figure 4. Pre-Harvest Photographs, A-C
- Figure 5. Post-Harvest Photographs, A-B

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: 1/1/04)

MAR 05 2019

For DCR Use Only:

File Number 282-9797-19 Case No. _____
 Date Rec'd 3-5-19 Nat. Hert. YES /
 Earliest Start 3-20-19 Nat. Hert. Imp. YES
 River Basin NASHUA Pub. Dr. Wat. WACHUSETT
 Gen. Obj. LT ACEC NO

Site Information

Location

Town Sterling Lot 5280
 Road Prescott Street/Bean Road
 Acres 30 Proposed Start Date 03/12/19
 Vol. MBF 13.2 Vol. Cds. 135 Vol. Tons _____

Plan Preparer

Name Russell Wilmot
 Address 180 Beaman St.
 Town, State, Zip West Boylston, MA, 01583
 Phone 774-261-1840
 Type of Preparer Mass. Licensed Forester
 *Mass. Forester License # 426
 *Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR/DWSP/OWM Wachusett/Sudbury
 Mailing Address 180 Beaman St.
 Town, State, Zip West Boylston, MA 01583
 Phone 774-261-1840
 Ch61 Ch61A Stew *Case # _____
 Est. Stumpage Value _____

Licensed Timber Harvester**

Name Will be provided when known
 Address _____
 Town, State, Zip _____
 Phone _____
 Mass. Lic. Harvester # _____
 **This information may be supplied after the plan is approved, but before work begins.

Best Management Practices

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)	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

* OPERATION OF MOTORIZED VEHICLES WITHIN 300' OF STILLWATER BASIN => ONLY DURING NOVEMBER 15 TO MARCH 15.
 * SEE ATTACHED NHESP LETTER FOR DETAILS

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. 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			

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

Forest Products

Products to be Harvested*

Table with 4 columns: Species, Mbfs/Cds, Mbfs/Cds, Mbfs/Cds. Rows include White Pine, Red Pine, Pitch Pine, Hemlock, Spruce, Other Sftwd., White Ash, Beech, White Birch, B & Y Birch, Black Cherry.

*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. Mbfs = thousand board feet.

Stand Treatment

Cutting Standards

Table with 5 columns: Indicate location on map, ST-1, ST-2, ST-3, ST-4. Rows include Forest Type, Acres, Landowner Objective, Designation of Trees, Type of Cut, Source of Regeneration.

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.

[X] 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.

Signature of Landowner(s) [Handwritten Signature] Date 2/25/19

Service Forester

Determination and Status

Approved [X] Disapproved [] Expires 3-5-2021. Signature of Service Forester/Director's Agent [Handwritten Signature] Date 3-20-2019

Final Report and Comments

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

Codes

Table with 4 columns: Forest Types, Designation of Trees, Type of Cut, Source of Regeneration. Rows include WP White Pine, WK WP/Hem, WH WP/Hdwd, WO WP/Oak, RP Red Pine, SR Red Spruce.

*If 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

Use only if further explanation is required of information on pages one or two or if "other" was used in any category.

Landowner: DCR-DWSP

Town: Sterling

File Number: 282-9797-19

BMPs	<p><u>There are no stream or wetland crossings. The landing will be accessed off of Griffin Rd. There is a 2,500' forest road that leads into the sale. Some gravel will be brought in near Griffin Rd and some small tree cutting to improve access. There is a shore maintenance road along Stillwater basin that forms the western boundary of the sale area and has a filter strip.</u></p>
Silviculture	<p><u>In order to release advance regeneration 5 openings in the overstory are being created, covering 6.6 acres. These openings range from less than a 0.7 acre to 2.2 acres in size with an average of 1.3 acres. They are well distributed throughout the area taking advantage of the advance regeneration comprised of white pine, hickory, oaks, and other hardwoods. No thinning will occur between any of these openings.</u></p> <p><u>There are a couple seeps towards the southern end of the sale where two large oaks are marked for removal in order to enhance the seep habitat. Releasing shrubs, regeneration and encouraging herbaceous vegetation.</u></p>
Objectives	<p><u>The objective of this operation is to diversify the age structure of the forest by removing the overstory in patches thereby releasing the advance regeneration. The current age structure is limited with an insufficient component of young forest.</u></p>
Other	<p><u>The Natural Heritage GIS layer comes into the sale area (Priority Habitat # 1543) on the western edge. One opening will have cutting and hauling in that specific area.</u></p>

Figure 2. Maps of harvest area showing approximate boundary, proposed openings and other features

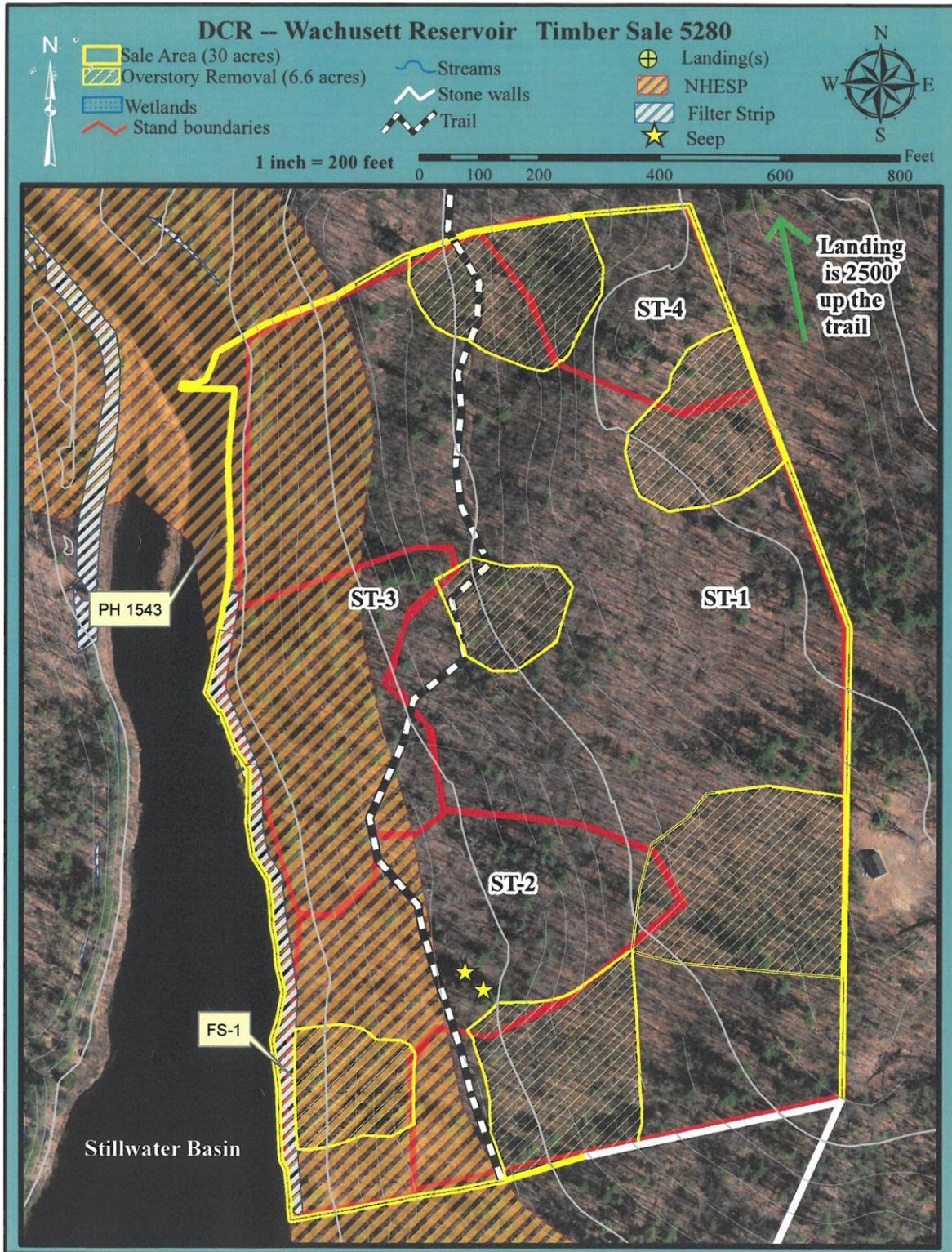


Figure 3. General locus map showing the location of the proposed timber harvest

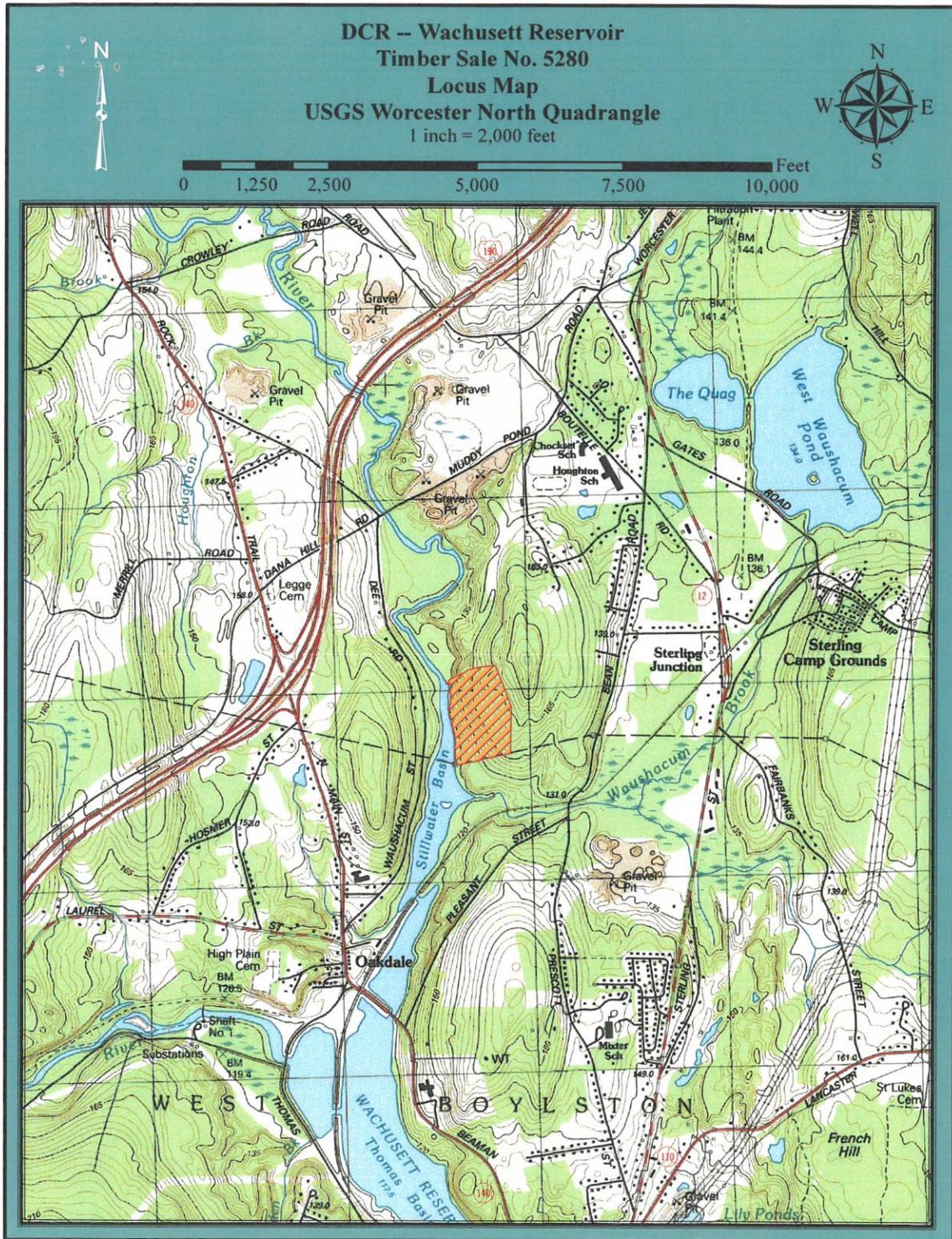


Figure 4. Pre-Harvest Photographs, A-C



A. Gate S20 Access.



B. Landing



C. Opening with white pine and hardwood regeneration.

Figure 5. Post-Harvest Photographs, A-B



A. The larger white pines were retained in this opening in order to provide important structural diversity.



B. These young white pines and hardwoods were released by the removal of most of the older forest overstory.