

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

Project Title: Lot 5289

DWSP Harvest Permit Number: 5289

DWSP Proposal ID: WA-20-258

DCR Forest Cutting Plan File Number: 134-28893-20

Site Information

Watershed: Wachusett

Town(s): Holden

Acres: 72

Nearest Road: Princeton Street

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: Mixed oak

Area of Critical Environmental Concern (ACEC)?: No

Soils: Hinckley and Merrimac fine sandy loam

Wetland Resources: Bear Swamp forms the western boundary of this area.

Vernal Pools: There is a verified vernal pool at the bottom of a steep-sided knoll in the eastern part of this area.

Harvest Information

Harvest Start Date: 9/9/2020

Harvest End Date: 12/15/2022

Number of Wetland Crossings: None

Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings: There are no stream crossings.

Filter Strips: There are no filter strips.

Wetland Crossings: There are no wetland crossings.

Harvesting in Wetlands: There is no harvesting in the 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

This is a typical dry-site mixed oak stand with black oak, red oak and white oak in the overstory along with far fewer red maple and white pine. Black oak predominates on the higher and drier portions with red oak taking its place on the lower, slightly damper sections. There is a light scattering of paper birch especially in the eastern half; perhaps a vestige of the fires that were probably more common when the railroad was active. There is a small pocket of large bigtooth aspen in the northeast corner of the area near the railroad bed which are nearing the end of their lifespan. Unexpectedly, there are two small red pine plantations. The northerly one dates to 1966. The other one was planted a little bit earlier in 1959. This one however is mostly blown over in what appears to have been a microburst in about 2010.

There is excellent advance regeneration through much of this area. Where there is not advance regeneration, mountain laurel is prevalent and at clearly interfering levels. This is especially so on the west slopes overlooking Bear Swamp. In the eastern part of the area, mountain laurel is also interfering along with witch-hazel in the lower, damper areas. Other common shrubs present are huckleberry, lowbush blueberry and sheep-laurel. Maple-leaved viburnum is present and seems to be well restricted to the Canton till soil in the southwestern part of this area as is sassafras.

The age structure of this working unit is as follows; 0%, 0-20 years old; 0% 21-40 years, 3%, 41-60 years; 0%, 61-80 years; 2%, 81-100 years; 95%, >100 years old. Most of this forest originated in about 1917. The oldest stands originated in about 1914, making them about 106 years old.

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

With an excellent layer of young trees in this area, openings in the older forest will be made on 20 acres thereby achieving the goal of creating a new young forest on close to 1/3rd of this area. This will be accomplished by the removal of the older forest in 19 patches that average 1 acre with the largest of about 2 acres. These are well distributed throughout the proposed area taking advantage of where the regeneration is best. Given the dry character of this area, openings have been placed in order to take advantage of where white pine regeneration is present. Large trees are being retained in most of these openings that are larger than ½ acre both singly and in small clusters. These trees provide valuable structural diversity to these openings and it is expected that most of these retained trees will be allowed to grow indefinitely into the future. In this area, these retained trees are primarily white pines, which are better suited to growing and regenerating on this dry site. Active den/nest trees and exceptional individuals of all species present are being retained for habitat and/or diversity.

Cultural Resources

This lot was reviewed by the DCR archaeologist and all recommendations will be followed. There is no known cultural significance to this area, either historically or pre-European contact.

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.

DWSP's Conservation Management Practices regarding vernal pools are being followed.

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-B
- 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)

For DCR Use Only:

File Number 134-288-93-200 Case No.
Date Rec'd 6-30-20 Nat. Hert. YES /
Earliest Start 7-11-20 Nat. Hert. Imp. YES
River Basin NASHUA Pub. Dr. Wat. WACHUSETT
Gen. Obj. LT ACEC NO

Site Information

Location

Town Holden Lot 5289
Road Princeton Street
Acres 72 Proposed Start Date 9/20
Vol. MBF 42.1 Vol. Cds. 369 Vol. Tons

Plan Preparer

Name Gregory S. Buzzell
Address 180 Beaman Rd.
Town, State, Zip West Boylston, MA, 01583
Phone 774-261-1841
Type of Preparer Mass. Licensed Forester
*Mass. Forester License # 25
*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 608-792-7806
Ch61 ☐ Ch61A ☐ Stew ☐ *Case #
Est. Stumpage Value

Licensed Timber Harvester**

Name To be supplied 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)	<u>50'</u>	<u>50'</u>		

* Around Vernal Pools

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

* SILENT ROADS/TRALES ARE EXISTING
* SEE NHESP DETERMINATION LETTER FOR
WOOD TRACT (ATTACHED)
* OPERATION OF MOTOR VEHICLES ONLY DURING:
0-50' FROM ASHBLUMSUIT ROAD → NOV 15 TO APRIL 15
50-200' FROM ASHBLUMSUIT ROAD → OCT 15 TO APRIL 15
SEE NHESP LETTER FOR DETAILS
* USE VERNAL POOL BORDERS (ATTACHED)

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
		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*

Species	Mbf/Cds		Mbf/Cds
White Pine		Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	30.0
Hemlock		Black Oak	11.7
Spruce		White Oak	0.4
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	42.1
Beech		Cordwood (Cds)	369
White Birch		SW Pulp (Tons)	
B & Y Birch		HW Pulp (Tons)	
Black Cherry		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	OM	RP		
Acres	71	1		
Landowner Objective	LT	LT		
Designation of Trees	CT	OT		
Type of Cut	SH	n/a		
Source of Regeneration	AD	OT		

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 6.30.2022

Cutting Plan ☒ 7.16.2020

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

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 _____

Forest Types				Designation of Trees	Type of Cut	Intermediate Harvests:	Source of Regeneration
WP White Pine	HK Hemlock	OM Mixed Oak	CT Cut Tree	SH Shelterwood	CT Commercial Thin	AD Advanced	SE Natural Seed
WK WP/Hem	HH Hem/Hdwd	RM Red Maple	LT Leave Tree	ST Seed Tree	NT Non Com Thin	PL Plant	CO Coppice
WH WP/Hdwd	BC Blck Cherry	BE Beech	SB Stand Boundary	CC Clear Cut	SE Selection	HG Highgrade*	DS Direct Seed
WO WP/Oak	BB Bee/Bir/Map	SF Spruce/Fir	OT Other	SA Salvage	DL Diameter Limit*	OT Other*	
RP Red Pine	OH Oak/Hdwd	SM Sugar Maple	Landowner Objective	SN Sanitation			
SR Red Spruce	OR N Red Oak	PP Pitch Pine	LT Long-term Mgt.				
			ST Short-term Har.				

*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: DER-DWSP

Town: Holden

File Number: 134-28893-20

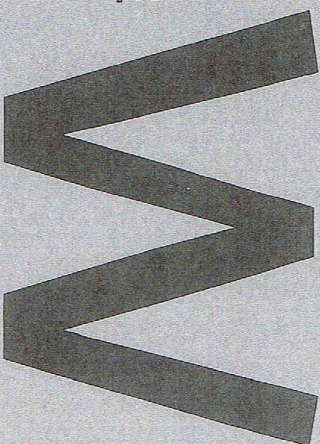
BMPs	<p><u>Vernal pool BMPs will be followed.</u></p> <p><u>No trees are being cut within the NHESP Priority Habitat of Rare Species bubble that is associated with Asnebumskit Brook.</u></p>
Silviculture	<p><u>In order to release advance regeneration, 19 openings in the overstory are being created, covering 20.0 acres. These openings range from 0.5 to 2.0 acres in size with an average of 1.0 acre. They are well distributed throughout the sale area focusing on where the advance regeneration is well established.</u></p> <p><u>No trees are being cut in ST-2.</u></p>
Objectives	<p><u>The main 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 forwarder haul roads have not been flagged so that either or both landings may be used. Existing roads and trails can be used.</u></p>



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

FILE # 134-28893-20

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 Dore/Dwse/own West Boylston in accordance with the
(Name of Owner) (Address)

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

MUNICETON lot.
LOT 5289

Approval Date 7.16.2020

ISSUED BY:

Director's Agent MICHAEL DOWNEY
DCR Phone No. 978-368-0126

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

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

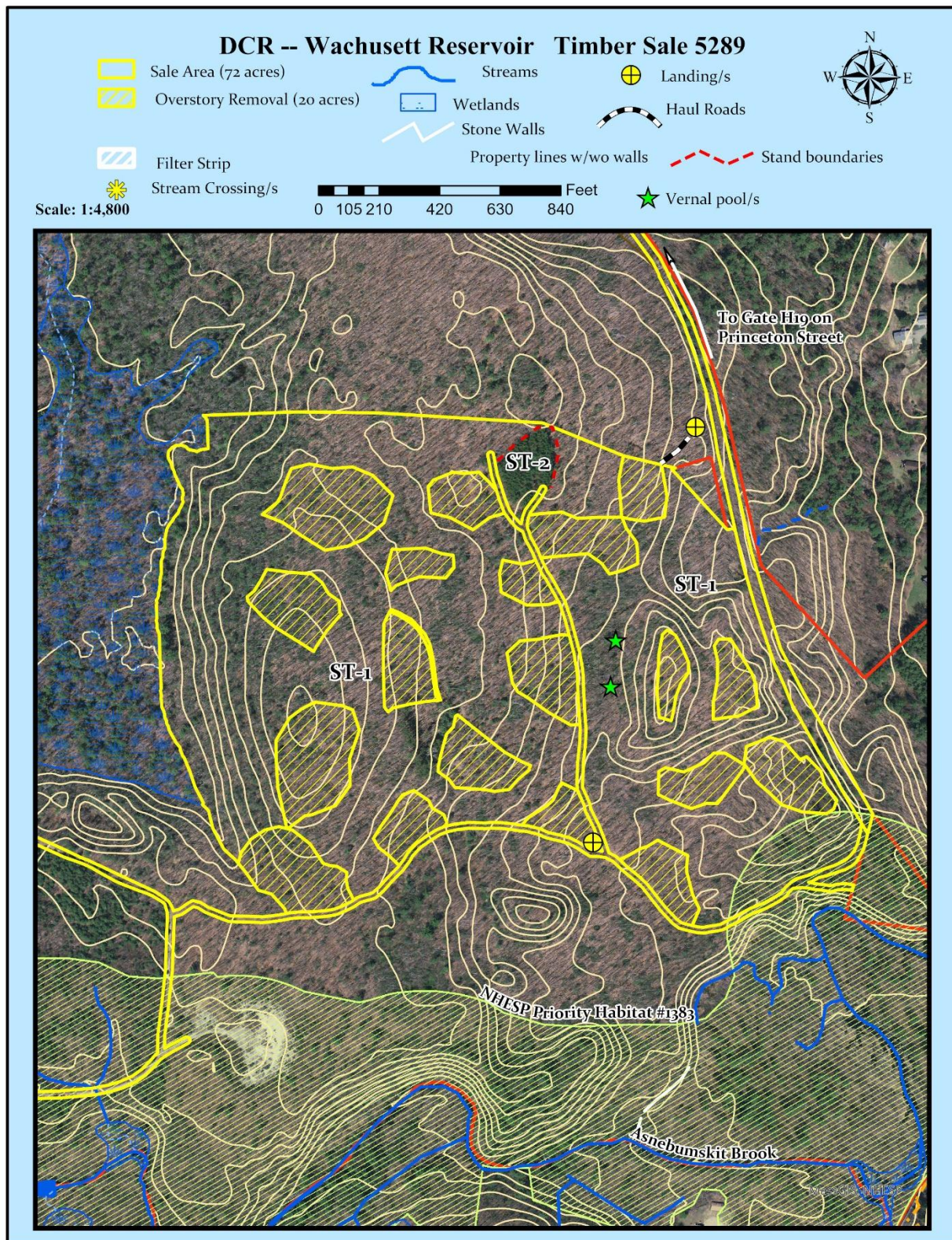


Figure 3. General locus map showing the location of the proposed timber harvest

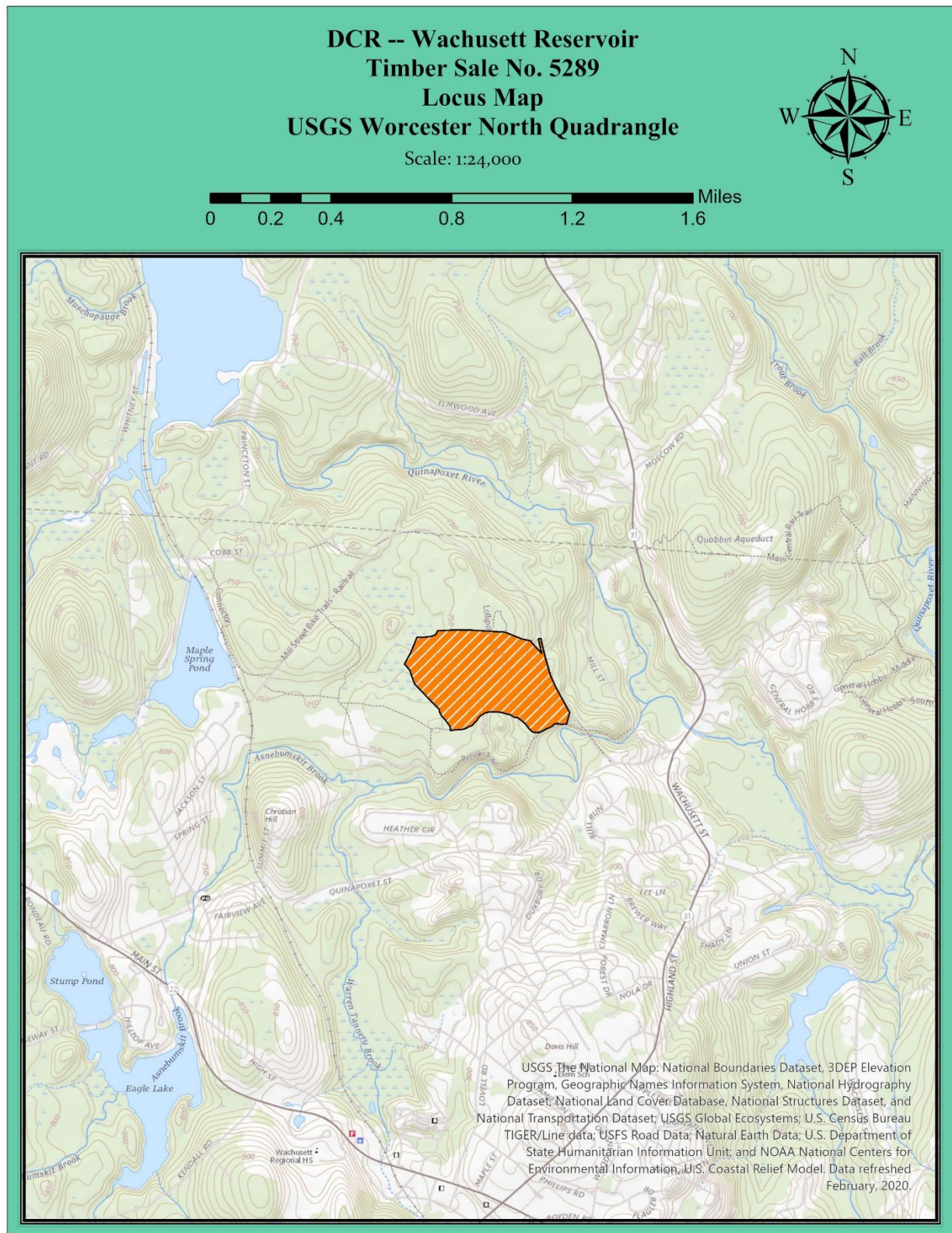


Figure 4. Pre-Harvest Photographs, A-B



A. Most of the trees in this area are being removed to make room for this excellent understory of young white pine and hardwood sapling.



B. The white pine in the foreground is being retained while the rest of the older trees are being removed to give the white pine and hardwood saplings the space and light they need to continue to thrive.

Figure 5. Post-Harvest Photographs, A-B



A. Opening with hardwood and pine regeneration released.



B. Opening completed with diverse regeneration released.