

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

Project Title: Lot 5286

DWSP Harvest Permit Number: 5286

DWSP Proposal ID: WA-19-241

DCR Forest Cutting Plan File Number: 039-23715-20

Site Information

Watershed: Wachusett

Town(s): Boylston

Acres: 68

Nearest Road: Cross Street

Natural Heritage Atlas overlap?: No

Public Drinking Water Supply Watershed?: Yes

Forest Types: White pine-Hardwood, Mixed oak, White pine

Area of Critical Environmental Concern (ACEC)?: No

Soils: Chatfield-Hollis-Rock outcrop complex, Paxton, Woodbridge

Wetland Resources: French Brook flows north through the middle of this area.

Vernal Pools: There is a potential vernal pool that will be treated as a verified pool pending further investigation in the coming years.

Harvest Information

Harvest Start Date: 6/23/2021

Harvest End Date: 6/30/2023

Number of Wetland Crossings: One

Number of Stream Crossings: One

Best Management Practices Applied

Stream Crossings: The stream will be bridged at the location of an historic crossing with stone abutments.

Filter Strips: No harvesting in the filter strips will occur.

Wetland Crossings: The narrow wetland will be crossed when dry or protected with appropriate material if wet.

Harvesting in Wetlands: No harvesting in wetlands will occur.

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 property was acquired in two separate parcels, once in 1991 and again in 1995. The dominant species is white pine followed by red oak, black oak, white oak, sugar maple, red maple, pitch pine, gray birch, paper birch, black birch, bigtooth aspen, white ash, black cherry, hickory, blue beech, American beech, hemlock and eastern hop hornbeam. The oak is dominant in the higher elevations where rock is exposed in some locations with well drained soils. The oak is of average quality for the site. Fortunately, white pine is regenerating very well underneath this oak as the mature pines look to be of better health and vigor. In the lower elevations white pine is more prevalent, still with a mix of oak and other hardwoods. The white pine is of good quality and there is a greater abundance of hardwoods in the advance regeneration on the moister soils. This is beneficial, as the oak and other hardwoods show better health on these lower slopes. Even though there are prevalent deer, the viburnum populations (indicator plant) are at good heights. There is heavy storm damage from 1989 along the southern bound and 2009 ice storm damage on the oaks which are still rebuilding their crowns. The property has been cut at different times prior to DCR ownership and are related to the different property owners. The southern area pine stand was thinned and has resulted in hardwoods, mostly birches, maples, pine and some oaks. These trees are now 2-8" in diameter and are starting to create a new age cohort. Unfortunately, the area of the thinning was not very defined and is spread out. The northern area has old signs of small firewood type harvesting and has aided in good pine regeneration.

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 good advance regeneration, openings are being made to release these young trees and create a new young age class. To that end, 11 openings are being made, spread throughout the area, specifically targeting the areas with good regeneration present. These openings total 10.7 acres and range in size from 0.23 to 2.0 acres in size and average 1.0 acres. The species composition of this new cohort will be different since, for the most part, the oak hardwoods are regenerating under the mature white pine and the white pine are regenerating under the oak hardwoods. This is appropriate given the site conditions favor pine where it is regenerating on the thinner soils and the hardwoods are regenerating in the more well drained-moist sites.

Cultural Resources

There are no known historic and archaeological resources associated with this site. If any features are uncovered before or during the harvest, they will be protected according to guidelines set forth in the Comprehensive Land Management Plan.

Rare or Endangered Species

There is a potential vernal pool that will be treated as a verified vernal pool.

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) *FEB 10 2020*

For DCR Use Only:

File Number	<u>039-23715-20</u>	Case No.	<u> </u>
Date Rec'd	<u>2-10-20</u>	Nat. Hert.	<u>NO/</u>
Earliest Start	<u>2-20-20</u>	Nat. Hert. Imp.	<u>NO</u>
River Basin	<u>Nashua</u>	Pub. Dr. Wat.	<u> </u>
Gen. Obj.	<u>LT</u>	ACEC	<u>NO</u>

** In ALB Area*

Location

Town	<u>Boylston</u>	Lot 5286
Road	<u>Cross Street</u>	
Acres	<u>68</u>	Proposed Start Date <u>4/20</u>
Vol. MBF	<u>75.2</u>	Vol. Cds. <u>140</u>
		Vol. Tons <u>161</u>

Landowner

Name	<u>DCR/DWSP/OWM Wachusett/Sudbury</u>						
Mailing Address	<u>180 Beaman St.</u>						
Town, State, Zip	<u>West Boylston, MA 01583</u>						
Phone	<u>608-792-7806</u>						
Ch61	<input type="checkbox"/>	Ch61A	<input type="checkbox"/>	Stew	<input type="checkbox"/>	*Case #	<u> </u>
Est. Stumpage Value <u> </u>							

Plan Preparer

Name	<u>Gregory S. Buzzell</u>
Address	<u>180 Beaman Rd.</u>
Town, State, Zip	<u>West Boylston, MA, 01583</u>
Phone	<u>774-261-1841</u>
Type of Preparer	<u>Mass. Licensed Forester</u>
*Mass. Forester License #	<u>25</u>

Licensed Timber Harvester**

Name	<u>To be supplied when known.</u>
Address	<u> </u>
Town, State, Zip	<u> </u>
Phone	<u> </u>
Mass. Lic. Harvester #	<u> </u>

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

Stream Crossings

Indicate location on map	<u>SC-1</u>	<u>SC-2</u>	<u>SC-3</u>	<u>SC-4</u>
Type of Crossing	<u>BR</u>			
Existing Structure	<u>No</u>			
Type of Bottom	<u>ST</u>			
Bank Height (ft)	<u>3</u>			
Stabilization	<u>CO</u>			

Harvesting in Wetlands

Indicate location on map	<u>HW-1</u>	<u>HW-2</u>	<u>HW-3</u>	<u>HW-4</u>
Forest Type (see pg 2)				
Acres to be Harvested				
Resid. Basal Area (>50%?)				

Wetland Crossings

Indicate location on map	<u>WC-1</u>	<u>WC-2</u>	<u>WC-3</u>	<u>WC-4</u>
Length of Crossing	<u>20'</u>			
Mitigation	<u>OT</u>			
Stabilization	<u>CO</u>			

Service Forester Comments

Filter Strips

Indicate location on map	<u>FS-1</u>	<u>FS-2</u>	<u>FS-3</u>	<u>FS-4</u>
Width (50', 100', or VA)	<u>VA</u>	<u>VA</u>		

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
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	before plan may be approved and cutting may begin.
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Some forestry activities, such as prescribed burning and
LO Landowner	PO Poled	ST Stone		GR Gravel	pesticide or fertilizer application may require additional permits.
OT Other	OT Other	HB Hay Bales		OT Other	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

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Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	65.8	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	4.9
Hemlock		Black Oak	4.1
Spruce		White Oak	0.4
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	75.2
Beech		Cordwood (Cds)	140
White Birch		SW Pulp (Tons)	161
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	WH	OM	WO	
Acres	44.3	15	8.7	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SH	SH	SH	
Source of Regeneration	AD	AD	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)

2/6/2020

Date

Determination and Status

039-23715-20

Final Report and Comments

Approved	Disapproved	Expires			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2-2022			
Signature of Service Forester/Director's Agent		Date			
Extension	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Expires	Ser. For. Ints.	
Amendment	App 1 <input type="checkbox"/>	Dis 1 <input type="checkbox"/>	App 2 <input type="checkbox"/>	Dis 2 <input type="checkbox"/>	1

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

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

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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: Boylston

File Number: 039-23715-20

BMPs	<p>There is an old stone abutment at SC-1. There is currently a small metal plate across the abutments that will be replaced by a suitable timber bridge/swamp mats.</p> <p>WC-1 is on one of these old atv trails that crossed the outlet of a small, unmapped wetland adjacent to French Brook. Even if the wetland is dry or frozen at the time, tops or corduroy will be used at a minimum to protect the crossing.</p>
Silviculture	<p>In order to release advance regeneration, 11 openings in the overstory are being created, covering 10.7 acres. These openings range from 0.23 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. The only partial cutting between the patches is the 1-acre area as shown on the map and another area on the east side of French Brook that was too small to map.</p>
Objectives	<p>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.</p>
Other	<p>Forwarder haul roads have generally been flagged and painted. There are numerous old cart path/atv trails throughout this area. Some of them are being used as haul roads. Some of the obvious trails that will be used for haul roads have not been flagged. Only the portions of these trails that are being used as haul roads are shown...showing all of them would have cluttered the map.</p>



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

FILE # **039-03715-80**

FOREST CUTTING PLAN CERTIFICATE

WW

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

This certifies that **DCR-DNSP** **West Bayston, MA** 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

Cross St. lot.

Approval Date **3/1/00**

Director's Agent **Laura Dooley**

DCR Phone No. **978-637-2090 ext 7112**

ISSUED BY:

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

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

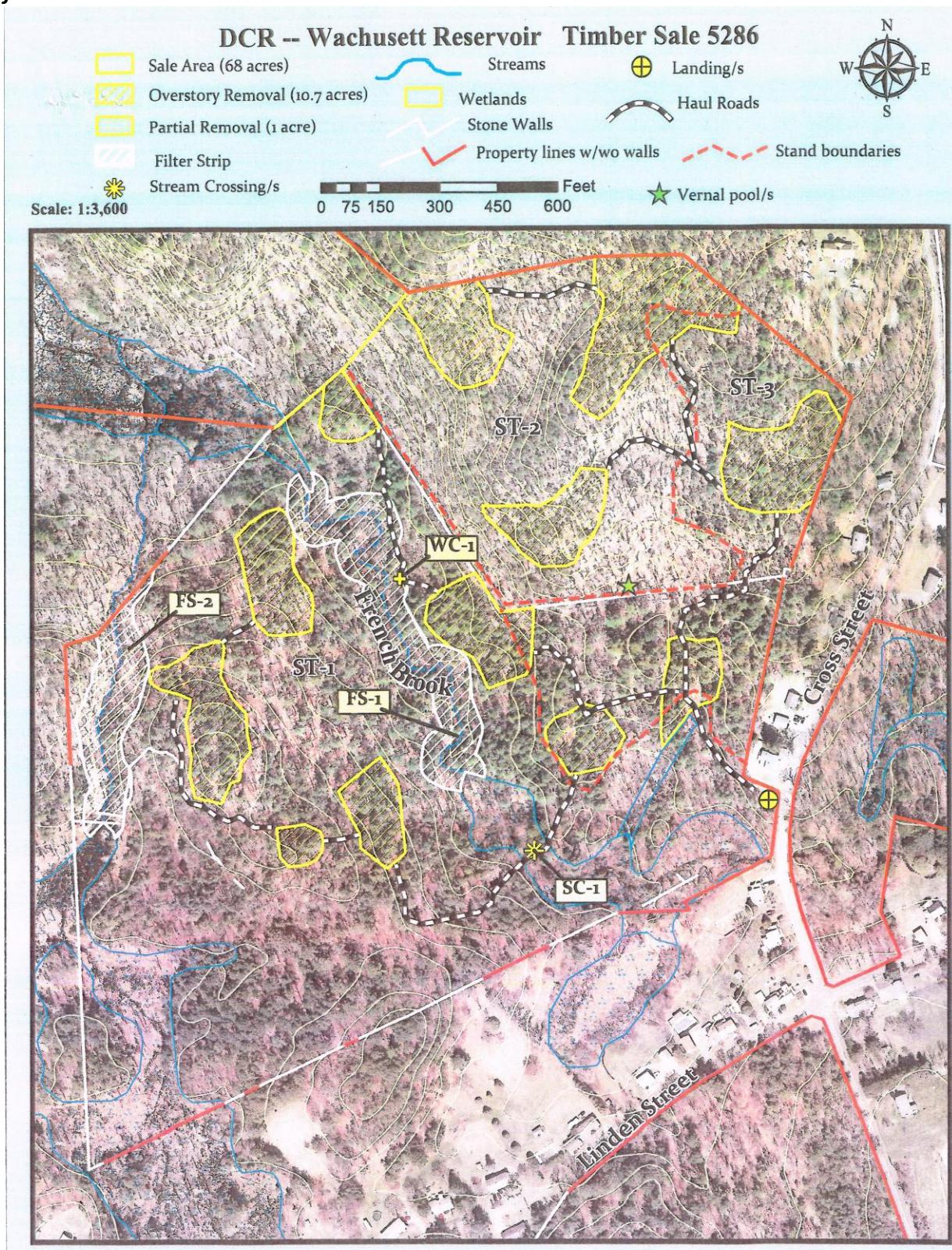


Figure 3. General locus map showing the location of the proposed timber harvest

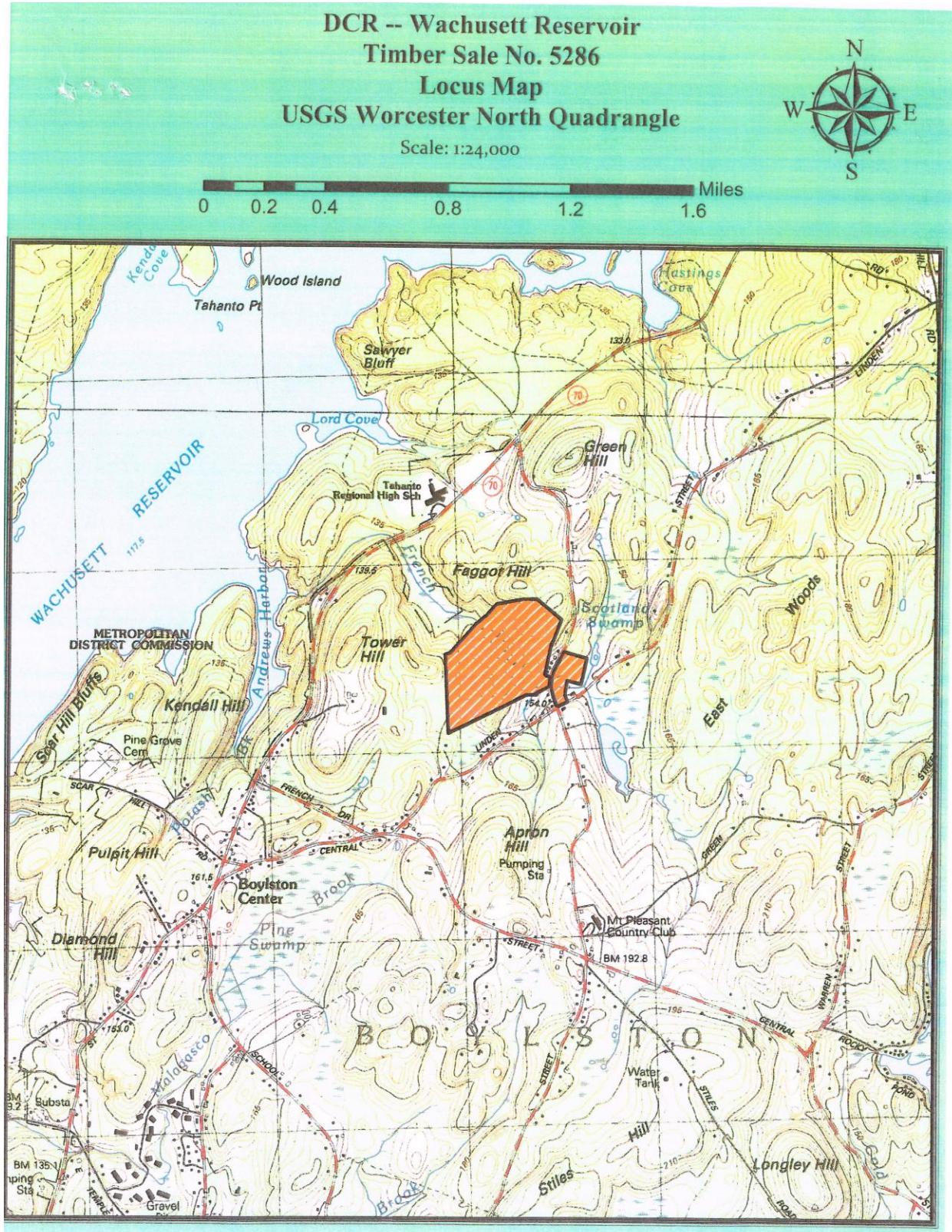


Figure 4. Pre-Harvest Photographs, A-B



A. Mature oak marked for harvest with better site suited white pine regeneration waiting to be released.



B. Mature white pine marked for harvest with a diverse hardwood and pine regeneration mix waiting for release.

Figure 5. Post-Harvest Photographs, A-B



A. Completed opening with plenty of mid story white pine retention.



B. Completed opening with a mix of retained trees and regeneration.