

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

**Project Title:**

<b>DWSP Harvest Permit Number:</b> 5295
<b>DCR Forest Cutting Plan File Number:</b>

**Site Information**

<b>Watershed:</b> Wachusett	<b>Town(s):</b> Holden
<b>Acres:</b> 59	<b>Nearest Road:</b> Princeton Street
<b>Natural Heritage Atlas overlap?:</b> Yes	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> Mixed oak, Mixed hardwoods	<b>ACEC?:</b> No
<b>Soils:</b> Canton fine sandy loam and Hinckley sandy loam	
<b>Wetland Resources:</b> Bear swamp, bear brook	
<b>Vernal Pools:</b> three potential vernal pools	

**Harvest Information**

<b>DWSP Permit Start Date:</b> 06/23/2021	<b>DWSP Permit End Date:</b> 06/30/2023
<b>Number of Wetland Crossings:</b> 0	<b>Number of Stream Crossings:</b> 0

**Best Management Practices Applied**

<b>Stream Crossings</b>	None
<b>Filter Strips</b>	None
<b>Wetland Crossings</b>	None
<b>Harvesting in Wetlands</b>	None

<b>DWSP Forester supervising this harvest</b>
<b>Name:</b> Russell Wilmot
<b>Forester License #:</b> 426
<b>Phone #:</b> 860-304-0655

## **NARRATIVES**

### **General Description/Forest Composition/History:**

This property was purchased by the MDC in 1993 just about the same time that a severe wildfire burned through much of these 59 acres. This area had also been heavily logged prior to MDC acquisition. The result of these two disturbances was the establishment of an excellent understory of primarily hardwood regeneration although white pine is present as well. In fact, the forest cover type on 19 acres of this area is a 26 year-old mixed hardwood stand comprised of red, black and white oaks, paper birch, gray birch and red maple. There are scattered surviving white pine above this young stand. The overstory on the remaining 36 acres is a mixed oak stand comprised of red, black and white oaks, with fewer red maple, sassafras, white pine and hemlock. Many of the trees in this stand, except for the eastern and northern lower slopes nearer to Bear Swamp, have severe fire scars on the butts. The dominant understory shrub is mountain laurel along with witch-hazel and highbush blueberry.

On the minority of the 36 acre mixed oak stand where there is not thick advance regeneration, there is a thick mountain laurel understory, particularly in the northern end of the area. Witch-hazel is the dominant shrub on the lower, eastern slopes near Bear Swamp.

### **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:**

Given the excellent and diverse understory of saplings, openings will be made in the overstory throughout this area. These openings range in size from 0.45 to 2.5 acres and total 13.5 acres. This will result in the establishment of a new age class on 24% of this management unit.

### **Cultural Resources:**

This area has been assessed by the DCR Archeologist for both known sites of cultural or archeological importance as well as for potential use by pre-Contact Native Americans.

### **Wildlife/Rare or Endangered Species:**

With the large number of old, fire-scarred trees, there should be no shortage of cavity trees in this area.

## **FIGURES**

**Figure 1. Forest Cutting Plan**

**Figure 2. Map 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. 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 \_\_\_\_\_ Case No. \_\_\_\_\_  
Date Rec'd \_\_\_\_\_ Nat. Hert. \_\_\_\_\_ / \_\_\_\_\_  
Earliest Start \_\_\_\_\_ Nat. Hert. Imp. \_\_\_\_\_  
River Basin \_\_\_\_\_ Pub. Dr. Wat. \_\_\_\_\_  
Gen. Obj. \_\_\_\_\_ ACEC \_\_\_\_\_

Site Information

### Location

Town Holden Lot 5295  
Road Princeton Road  
Acres 59.0 Proposed Start Date 06/21  
Vol. MBF 36.1 Vol. Cds. 194 Vol. Tons 5

### 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)				

### 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
		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

Forest Products

**Products to be Harvested\***

Species	Mbf/Cds		Mbf/Cds
White Pine	2.3	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	16.9
Hemlock		Black Oak	10.6
Spruce		White Oak	6.2
Other Sftwd.		Other Hdwd.	
White Ash		<b>Total Mbf</b>	36.1
Beech		<b>Cordwood (Cds)</b>	194
White Birch		<b>SW Pulp (Tons)</b>	5
B & Y Birch		<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

\*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.

Stand Treatment

**Cutting Standards**

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	OM	MH		
Acres	43	16		
Landowner Objective	LT	LT		
Designation of Trees	CT	OT		
Type of Cut	SH	OT		
Source of Regeneration	AD	OT		

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. 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	
Cutting Plan	<input type="checkbox"/>	<input type="checkbox"/>		
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"/>

**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

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

\*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

Landowner: \_\_\_\_\_

Town: \_\_\_\_\_

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

File Number: \_\_\_\_\_



<b>BMPs</b>	<u>No trees are being cut within 100' of either of the vernal pools at the south end of the sale area.</u>
<b>Silvicultur</b>	<u>In order to release advance regeneration, 12 openings in the overstory are being created, covering 13.5 acres. These openings range from 0.4 to 2.5 acres in size with an average of 1.1 acre. They are well distributed throughout the sale area focusing on where the advance regeneration is well established. No trees are being cut in the forest between the openings.</u>
<b>Objectives</b>	<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>
<b>Other</b>	<u>The forwarder haul road from the landing to the old railroad bed has been flagged. The forwarder haul roads between the openings have been not flagged as it is not necessary given the proximity of the openings to each other.</u> <u>No trees are being cut in ST-2.</u>



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

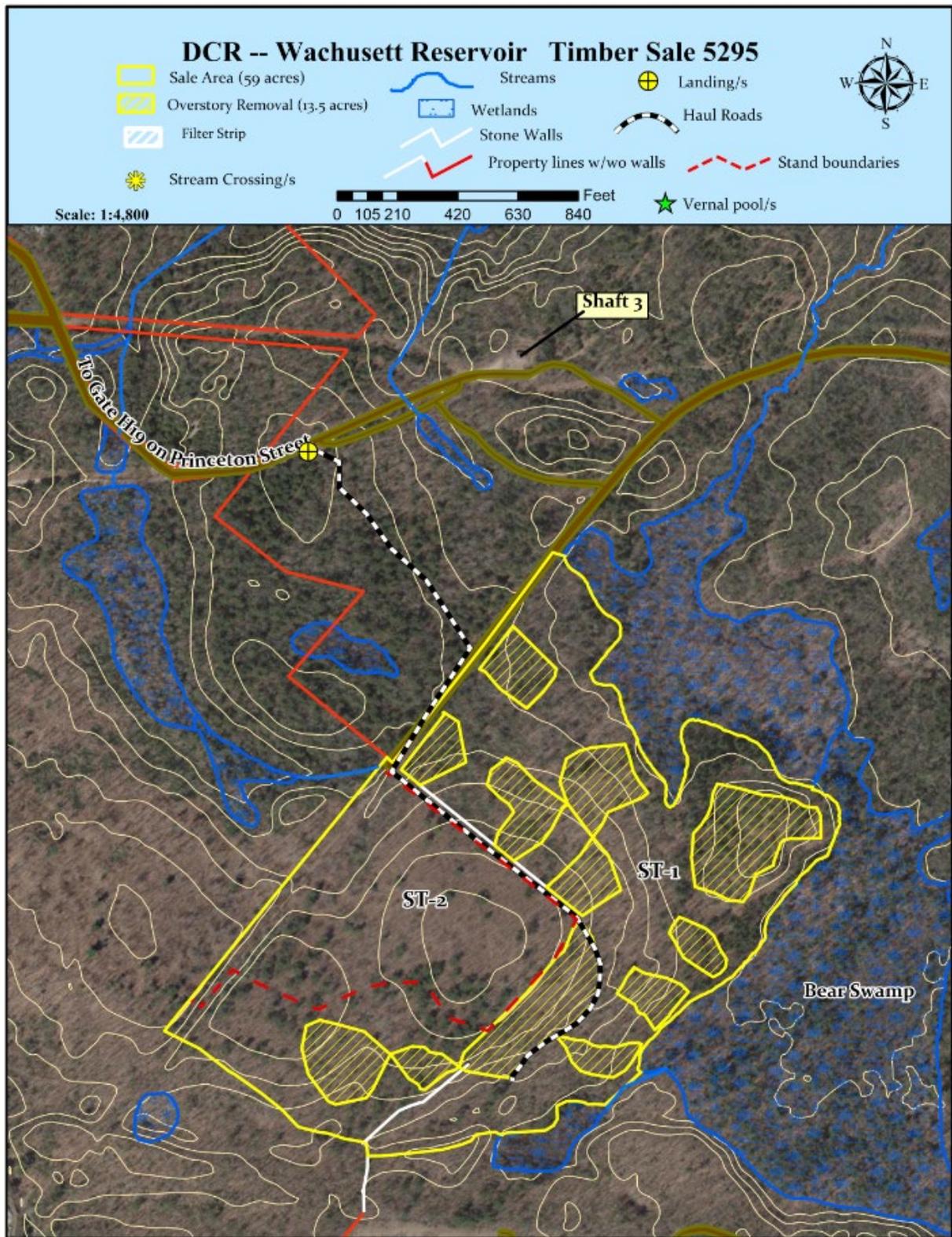
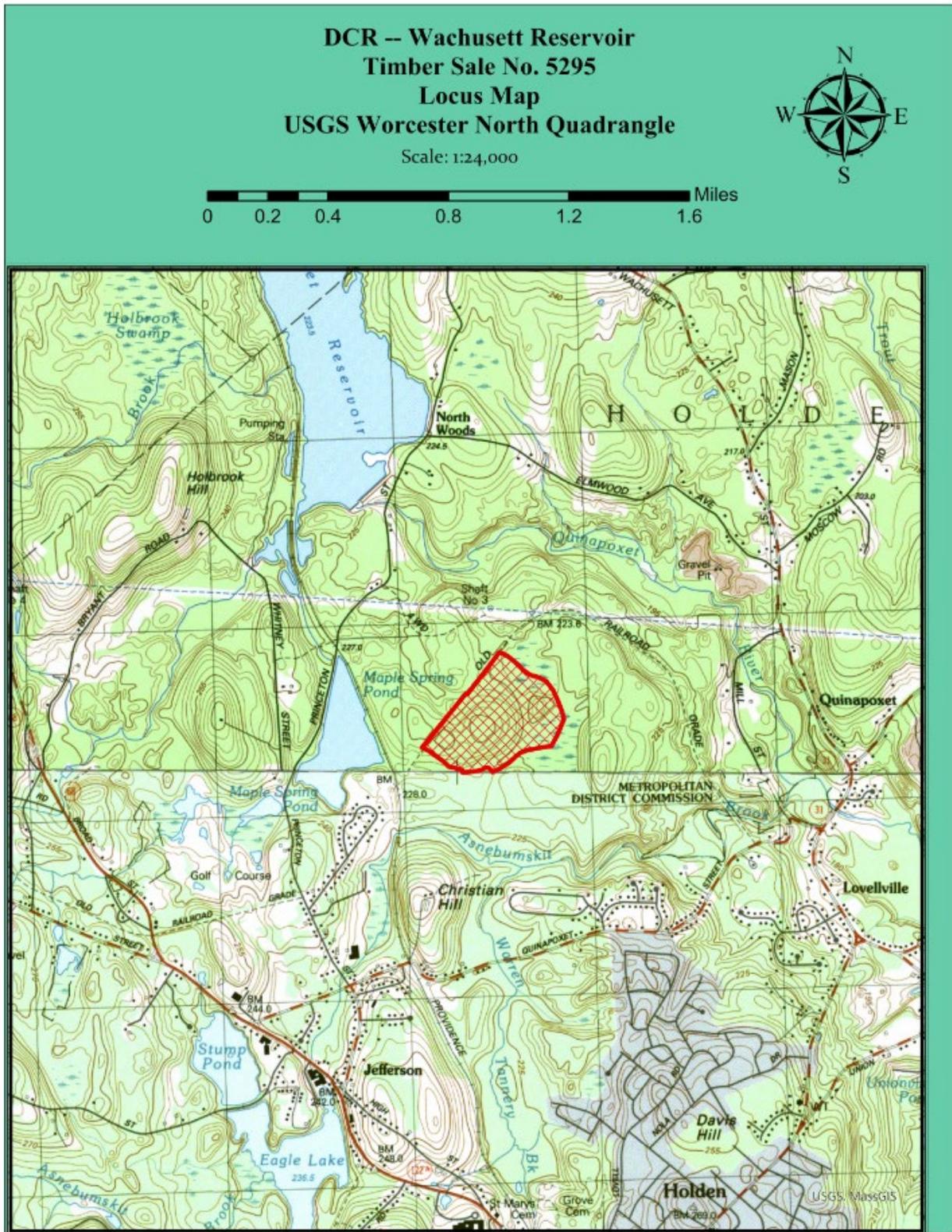


Figure 3. General locus map showing the location of the proposed timber harvest



**Figure 4. Post-Harvest Photographs, A-B**



A. These young white pines and hardwoods now have the light and space they need to continue to thrive.



B. These oak seedlings became established in one of the overstory openings during the fall of 2021 when this timber sale was completed.