

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

Project Title: Lot 5287

DWSP Harvest Permit Number: 5287

DWSP Proposal ID: WA-20-257

DCR Forest Cutting Plan File Number: 241-24742-20

Site Information

Watershed: Wachusett

Town(s): Princeton

Acres: 16

Nearest Road: Bullard Road

Natural Heritage Atlas overlap?: No

Public Drinking Water Supply Watershed?: Yes

Forest Types: White pine/oak, White pine

Area of Critical Environmental Concern (ACEC)?: No

Soils: Hinckley sandy loam

Wetland Resources: Babcock Brook borders the area to the south and Snow Pond to the north.

Vernal Pools: None known.

Harvest Information

Harvest Start Date: 3/25/2020

Harvest End Date: 6/30/2023

Number of Wetland Crossings: None

Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings: There are no stream crossings.

Filter Strips: No harvesting will occur within the filter strip.

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

This forest is identified by its flat topography that slopes down on all sides gradually. It is a well-drained site with a potentially high-water table as evidenced by the highbush blueberry. The dominant species is white pine and red oak followed by black birch, black cherry, black oak, sugar maple, red maple, striped maple, American beech, and paper birch. The sugar maples are on the southwestern slopes and not on the flat hilltop. The white pine is of the best vigor on the site and the oak is of decent quality, although smaller oaks are now dying back. Fortunately, white pine is regenerating well and is for the most part spread out throughout the lot. There is some mixing of oak regeneration on the site as well as areas with chestnut sprouts and hemlock regeneration. Mountain laurel is present in small veins and patches throughout the site and becomes thick on the northern slopes where the hemlock is thinning out leading down to Snow Pond.

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 on much of this area, openings will be made to release advance regeneration. The focus of management is on the flat hilltop and the gently sloped areas adjacent to it. Three openings totaling 2.7 have been marked with one of the openings being 2.0 acres in size. These openings specifically targeted areas with good regeneration present. Good white pine regeneration has been especially targeted as pine is better suited to this site, although a mix of hardwoods including oak will be released as well. A thinning of the white pines will occur on a 1.7 acre area adjacent to the openings.

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 are no critical habitats or known rare or endangered plants or wildlife.

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-D
- Figure 5. Post-Harvest Photographs, A-C

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 27 2020

For DCR Use Only:

File Number 241-24743-20 Case No.
Date Rec'd 2-27-20 Nat. Hert. NO /
Earliest Start 3-13-20 Nat. Hert. Imp. NO
River Basin NASQUA Pub. Dr. Wat. WACHUSETT
Gen. Obj. LT ACEC NO

Site Information

Location

Town Princeton Lot 5287
Road Bullard Road
Acres 16 Proposed Start Date 4/20
Vol. MBF 39.9 Vol. Cds. 61 Vol. Tons 58

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)	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

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	37.3	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	2.6
Hemlock		Black Oak	
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	39.9
Beech		Cordwood (Cds)	61
White Birch		SW Pulp (Tons)	58
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.

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WO	WP		
Acres	12.5	3.5		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SH	SH		
Source of Regeneration	AD	AD		

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

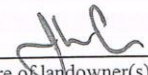
Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value specie

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)

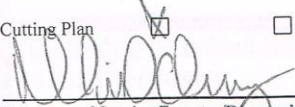
2/27/2020
Date

Service Forester

Determination and Status 241-21743-20

Approved Disapproved Expires 2-27-2022

Cutting Plan


Signature of Service Forester/Director's Agent

3-9-2020
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

Extension 1 2 Expires 1 Ser. For. Ints. 1

Amendment App 1 Dis 1 App 2 Dis 2 1

Codes

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

Landowner: D012-DWSP
Town: Princeton
File Number: 241-24743-20

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

BMPs	<u>There will be no cutting taking place within FS-1 and FS-2.</u>
Silviculture	<u>In order to release advance regeneration, 3 openings in the overstory are being created, covering 2.7 acres. These openings range from 0.25 to 2.1 acres in size with an average of 0.9 acres. They are placed up on the plateau within the sale area focusing on where the advance regeneration is well established. The only partial cutting between the patches is the 1.7 acre area as shown on the map.</u>
Objectives	<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> <u>A secondary objective is to help establish regeneration where it is lacking by conducting a thinning.</u>
Other	<u>The landing on Bullard Road and access into the woodlot will be very tight and need careful attention prior to the initial layout.</u>



dcR

COMMONWEALTH OF MASSACHUSETTS

Department of Conservation and Recreation

Division of State Parks and Recreation

FILE # 241-24743-20

FOREST CUTTING PLAN CERTIFICATE

W

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

This certifies that DeLusse/owner (Name of Owner) W. Boylston (Address) in accordance with the

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

BUUARD lot. LOT 5287

Approval Date 3-9-2020

Director's Agent MICHAEL DOWNEY
DCR Phone No. 978-368-8126

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

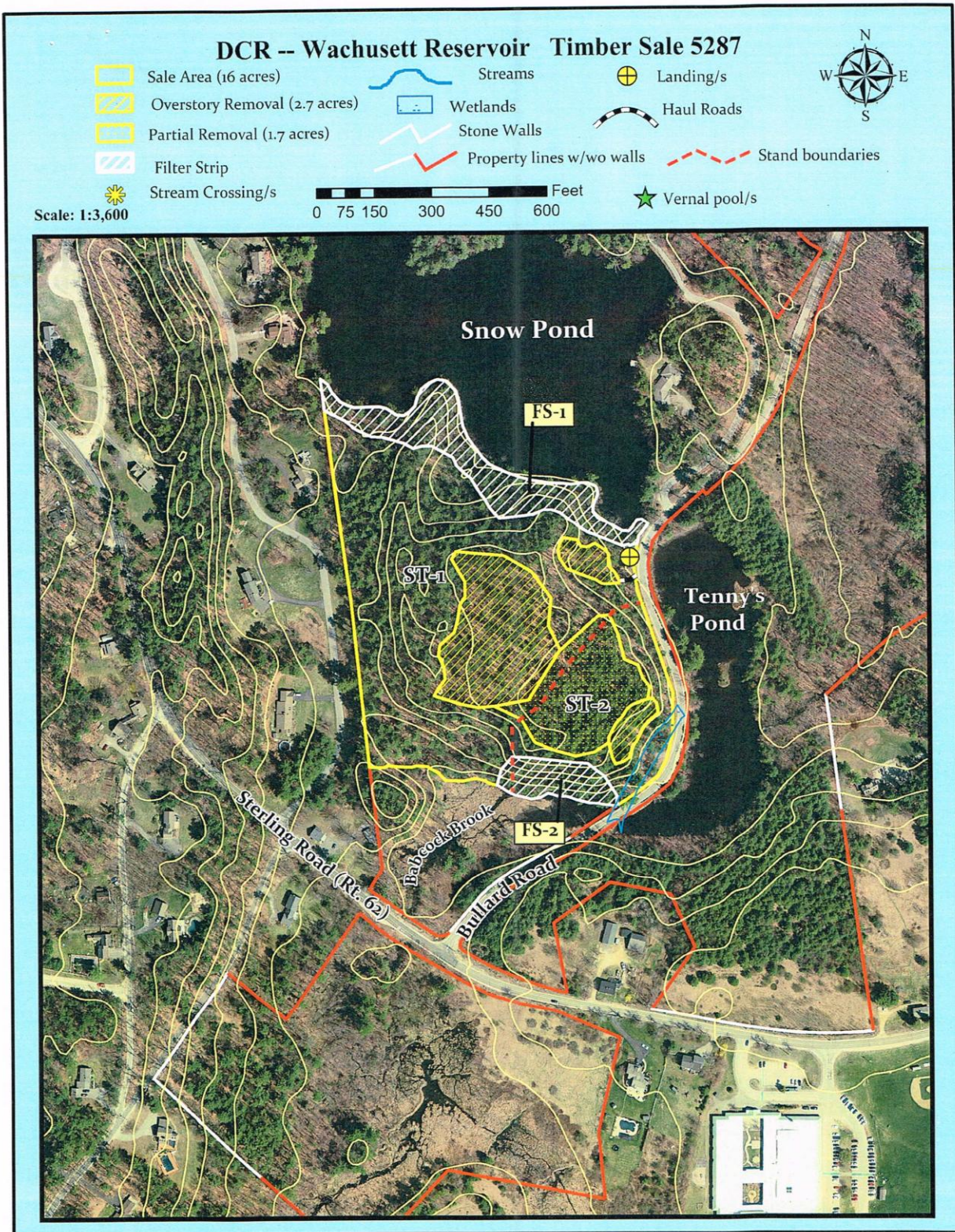


Figure 3. General locus map showing the location of the proposed timber harvest

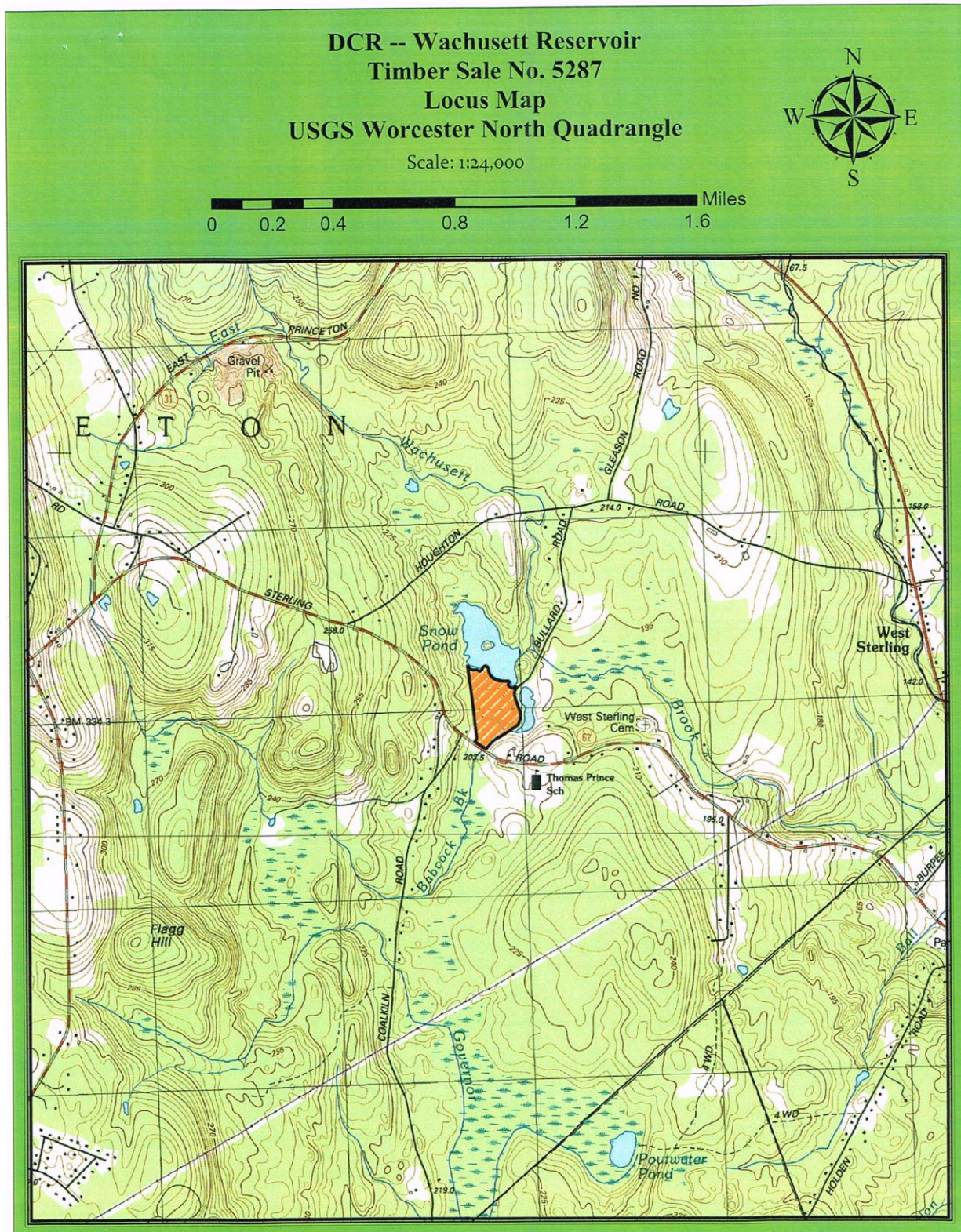


Figure 4. Pre-Harvest Photographs, A-D



A. Landing location on Bullard Road in Princeton.



B. The overstory here is being removed to release the young white pine and hardwoods and give them the light and space they need to continue to thrive.



C. This group of white pine trees is being retained within the opening to provide structural diversity.



D. This area is being thinned to provide the remaining overstory trees more space.

Figure 5. Post-Harvest Photographs, A-C



A. An area of overstory removal with good regeneration and retention of white pines.



B. The overstory of primarily white pines where removed to give this more diverse understory the light and space they need to thrive.



C. This area was thinned to give the remaining trees more space and light.