

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

Project Title: Lot 5292

DWSP Harvest Permit Number: 5292

DWSP Proposal ID: WA-20-215

DCR Forest Cutting Plan File Number: 134-32172-21

Site Information

Watershed: Wachusett

Town(s): West Boylston

Acres: 68

Nearest Road: Malden Street

Natural Heritage Atlas overlap?: Yes

Public Drinking Water Supply Watershed?: Yes

Forest Types: Mixed oak

Area of Critical Environmental Concern (ACEC)?: No

Soils: Chatfield-Hollis-Rock outcrop complex

Wetland Resources: There are two small wetlands near the top of the hill that are connected by an intermittent stream.

Vernal Pools: The two wetlands each have a vernal pool.

Harvest Information

Harvest Start Date: 6/23/2021

Harvest End Date: 6/30/2023

Number of Wetland Crossings: None.

Number of Stream Crossings: Three.

Best Management Practices Applied

Stream Crossings: All three intermittent streams will be crossed with poles if they are dry or with bridges if they are flowing.

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

Wetland Crossings: No wetlands will be crossed.

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

The working unit was proposed, marked, sold and cut in 2010. At that time, there was no advance regeneration in the mixed oak stand while there was decent regeneration in the white pine-oak stand on the top of the hill. While the proposal in 2010 call for the creation of some overstory openings in the white pine-oak stand, in the end, the decision was made to not make any openings. The white pine-oak stand was treated essentially the same as the mixed oak stand. Overall stocking was decreased by roughly 30% while every white pine in the overstory was daylighted by removing all trees from their immediate vicinity. All of this was done to encourage the establishment of white pine regeneration on this very dry site. This operation was successful and today there is excellent advance regeneration of white pine throughout this area.

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 adequate advance regeneration now present throughout this working unit as a result of the harvest in 2010, openings will be made on up to 20.6 acres thereby achieving the goal of creating a new age class on 1/3rd of this area. This will be accomplished by the removal of the overstory in patches that average about 1 acre with a maximum size of about 2 acres. These will be well distributed throughout the proposed area taking advantage of where the white pine regeneration is best.

Any partial cutting that may occur between the openings on up to 1/3rd of the area will be focused on benefiting white pine.

Cultural Resources

Each of the two small wetlands has a small concrete weir with a v-notch that in the past would have allowed more water to be held in the wetlands. This was done to provide water for steam engines used in the quarrying activities that took place in the granite outcrops on this hilltop. The weirs do not currently affect the water flow out of the wetlands.

Rare or Endangered Species

As a result of the proposal of this working unit in 2010, the two vernal pools (#129 & 130) have been verified.

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 Photos, 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)

For DCR Use Only:

File Number	134-32172-21	Case No.	/
Date Rec'd	12-16-2020	Nat. Hert.	YES /
Earliest Start	1-4-2021	Nat. Hert. Imp.	YES
River Basin	NASHUA	Pub. Dr. Wat.	WACHUSSETT
Gen. Obj.	LT	ACEC	NO

Location

Town West Boylston/Holden Lot 5292

Road Malden Street in West Boylston and Holden

Acres 68 Proposed Start Date 12/20

Vol. MBF 10.4 Vol. Cds. 239 Vol. Tons 0

Plan Preparer

Name Russell Wilmot

Address 180 Beaman Rd.

Town, State, Zip West Boylston, MA, 01583

Phone 860-304-0655

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 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.

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing	PO	PO	PO	
Existing Structure	NO	NO	NO	
Type of Bottom	MU	MU	MU	
Bank Height (ft)	~1'	~1'	~1'	
Stabilization	CO	CO	CO	

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		

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		

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

Codes

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.

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine		Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	3.7
Hemlock		Black Oak	6.7
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	10.4
Beech		Cordwood (Cds)	239
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			
Acres	68			
Landowner Objective	LT			
Designation of Trees	CT			
Type of Cut	SH			
Source of Regeneration	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

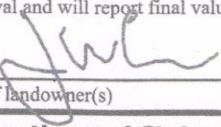
Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

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.

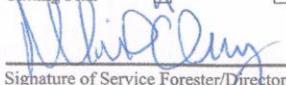
I (we) certify that I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two hundred feet of the area to be harvested.

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)

12/3/2020
Date

Determination and Status #134-32172-21

Approved	Disapproved	Expires			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12-16-2022			
		1-8-2021			
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

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

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/OWN

Town: Holden/West Bayston

File Number: 134-32172-21

Other	Objectives	Silviculture	BMPs
			<p><u>There will be no cutting taking place within FS-1 and FS-2.</u></p> <p><u>All stream crossings are at pre-existing locations. SC-2 in particular shows signs of past rutting on the uphill approach and so extra care will be taken to protect the approaches before hauling begins.</u></p> <p><u>Two landings have been identified. The northern landing may be utilized for the openings on the top of the hill if the case arises where less soil/forwarder damage would occur by using it or if the equipment cannot make the climb from the southern landing.</u></p>
			<p><u>In order to release advance regeneration, 16 openings in the overstory are being created, covering 17 acres. These openings range from 0.18 to 2.3 acres in size with an average of 1.0 acres. They are spread out throughout the sale area focusing on where the white pine advance regeneration is well established, or mature white pine is an immediate seed source.</u></p> <p><u>There is no partial cutting on this sale.</u></p>
			<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>
			<p><u>The southern landing has a concrete ditch at the roadside edge that will have to be protected and planked for truck use/access.</u></p> <p><u>All stream crossings must be bridged if streams are flowing.</u></p>

dcr

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



FILE # 134-32172-21

VV

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

DCR/DSR/own

(Name of Owner)

(Address)

W. Boylston

in accordance with the

provision of M.G.L. Chapter 132, Section 40-46, filed in Clinton with the Dept. of Conservation

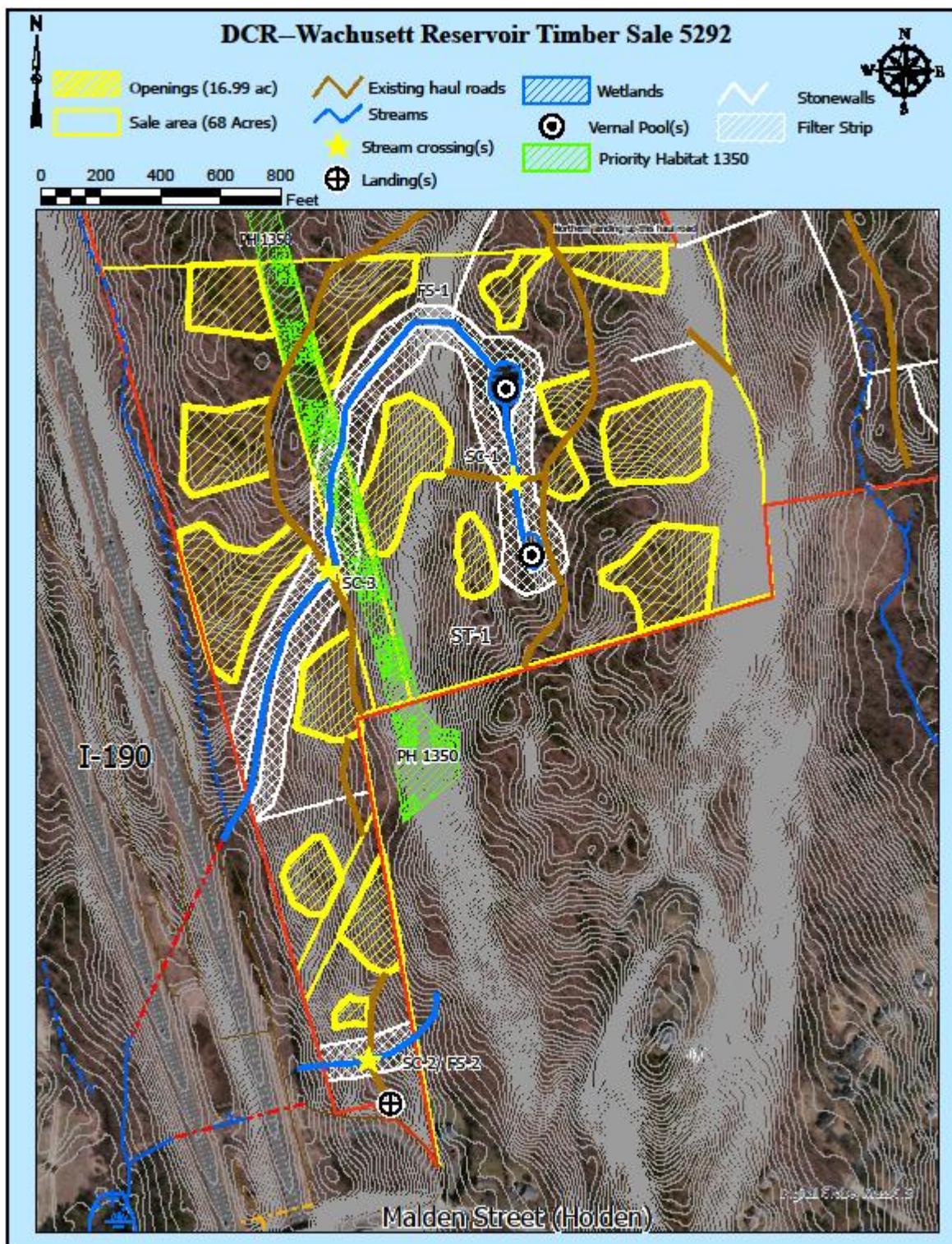
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the
MALDEN lot.

LOT 5292 1-8-2021
Approval Date

ISSUED BY: Priscilla E. Geigls

Director's Agent Michael Downey
DCR Phone No. 978-368-0126
Priscilla E. Geigls, Director
Division of State Parks and Recreation

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



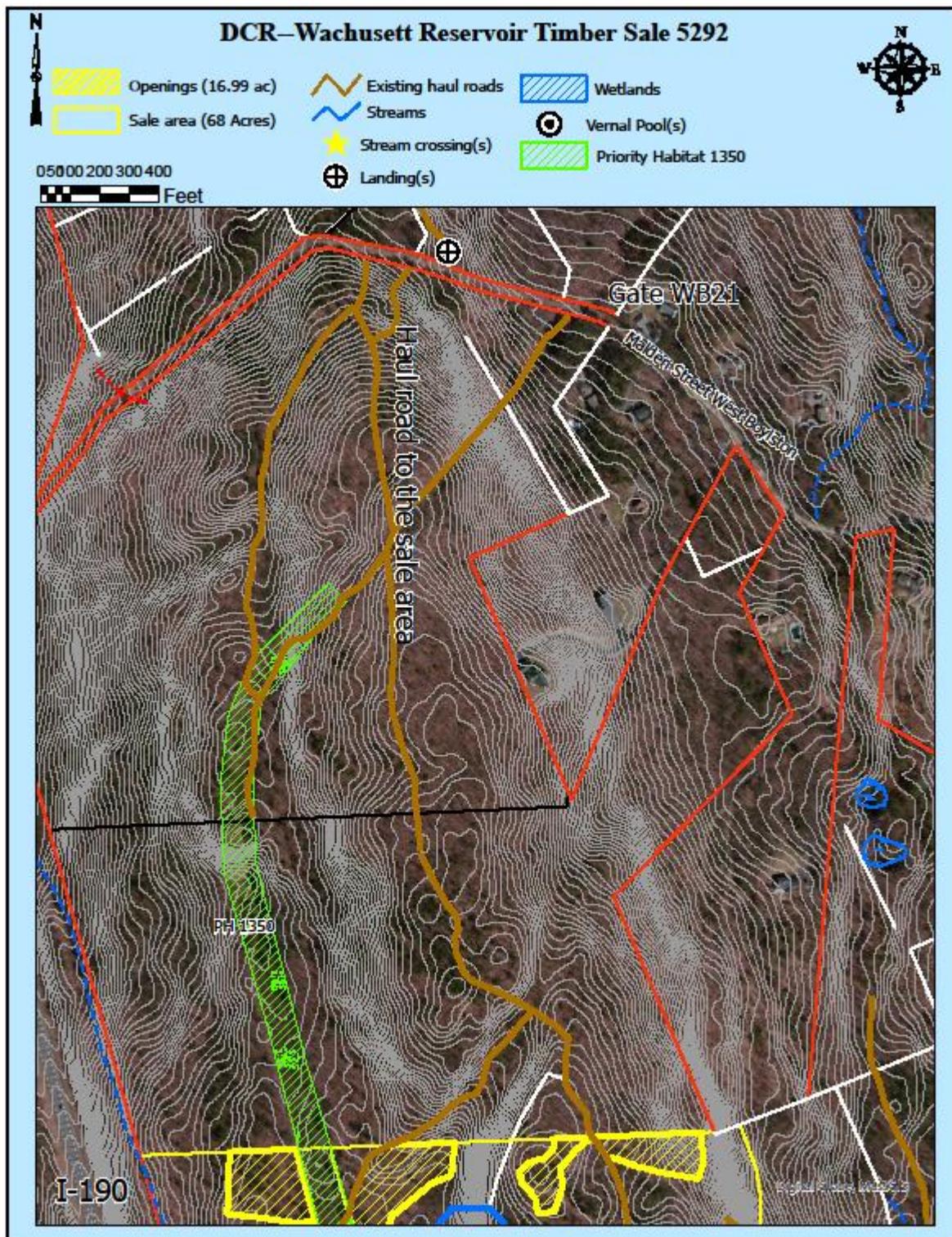


Figure 3. General locus map showing the location of the proposed timber harvest

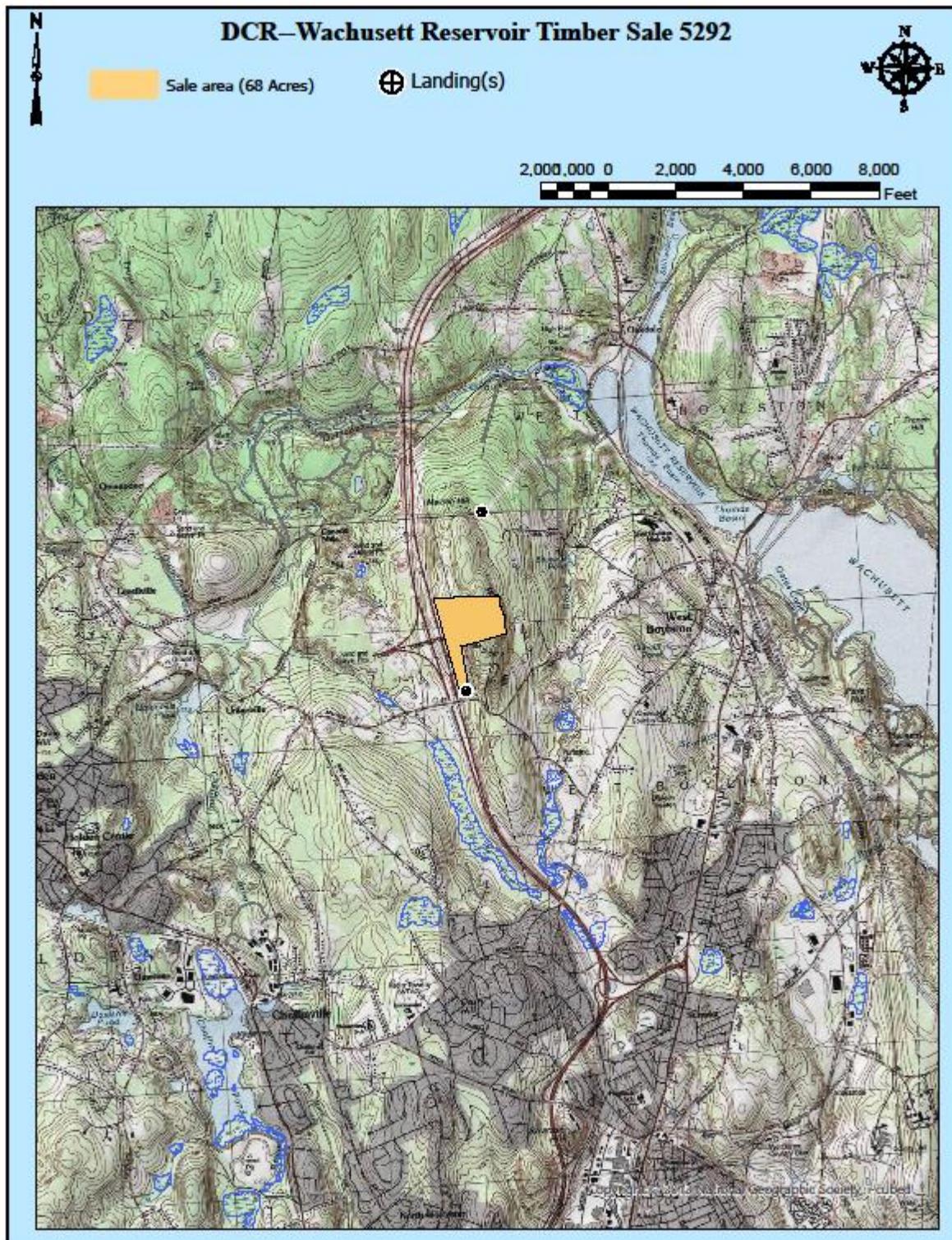


Figure 4. Pre-Harvest Photographs, A-B



A. Mature oaks marked for harvest which will release the better site situated white pine.



B. Marked oaks for harvest with mature white pine retention and a mix of hardwood and white pine regeneration.

Figure 5. Post-Harvest Photos, A-C



A. The landing as viewed from the paved road extension off of Malden Street.



B. An area of overstory removal where the younger white pines and hardwoods now have the room and light to continue to grow.



C. The pine in the foreground was retained to provide additional vertical structure in this area of overstory removal.