

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

Project Title: Fisk Hill Young Forest Focus Area, entry 1

DWSP Harvest Permit Number: 3173
DWSP Proposal ID: NS-22-17
DCR Forest Cutting Plan File Number: 204-33999-23

Site Information

Watershed: Quabbin	Town(s): New Salem
Acres: 12.5	Nearest Road: Route 202
Natural Heritage Atlas overlap?: Yes	Public Drinking Water Supply Watershed?: Yes
Forest Types: white pine-oak-hardwood	ACEC?: No
Soils: Chatfield-Hollis complex, rocky, 3 to 25%	
Wetland Resources: none	
Vernal Pools: none	

Harvest Information

Harvest Start Date: on or after 8/25/2022	Harvest End Date: on or before 12/16/2024
Number of Wetland Crossings: 0	Number of Stream Crossings: 0

Best Management Practices Applied

Stream Crossings	none
Filter Strips	n/a
Wetland Crossings	none
Harvesting in Wetlands	none

DWSP Foresters supervising this harvest

Name	Helen Johnson	Richard MacLean
Forester License #	383	467
Phone #	617-733-2937	857-263-0211
Email	Helen.Johnson@mass.gov	richard.maclean@mass.gov

NARRATIVE

General Description/Forest Composition/History:

This area has an oak-hardwood overstory with occasional emergent white pines and a mixed hardwood midstory. Hemlock, white pine, and black birch seedlings are present primarily in old skid roads, where soil disturbance provided a mineral soil seed bed for these light-seeded species. American chestnuts, which were functionally extirpated by chestnut blight about a century ago, persist in sending up periodic stump sprouts, only to be killed again.

Dominant species include eastern white pine, northern red oak, eastern hemlock, red maple, and black birch. Black and white oak, paper birch, black cherry, white ash, and American beech are also present but less common. Several of these are shade intolerant species that need full sun to germinate (black cherry, paper birch, white ash), indicating relatively recent early successional site conditions.

Forest health concerns on this site include numerous insects that attack hemlock (hemlock wooly adelgid, hemlock elongate scale, hemlock looper) and beech bark disease. Notably, both hemlock and beech have widely variable form and vigor; it appears that some beech on this site may be resistant to beech bark disease. Spongy moth has been present in recent years, this has not been one of the local hot spots for this invasive insect, and damage has been light.

Site Selection:

This harvest is in one of the Young Forest Focus Areas (YFFA) designated in the [DWSP 2017 Land Management Plan](#) (pp. 120-123) for the purpose of providing much needed early successional habitat for a variety of uncommon and declining wildlife species, including chestnut-sided warbler, prairie warbler, towhee, whip-poor-will, ruffed grouse, and American woodcock. This first entry into the YFFA is located next to the high tension power line in order to build on that existing early successional habitat, and with an eye to future adjacent entries rotating through the YFFA until they return to this starting point.

Silvicultural Objectives:

As stated in the 2017 Management Plan,

In order to create conditions favorable for early successional species, forest openings need to be large enough and placed appropriately to provide sufficient habitat to sustain viable animal populations over time. It would be counter-productive to create early successional habitat that was ecologically isolated or undersized. Such a site may actually serve as a sink habitat (when reproduction is insufficient to balance local mortality) causing populations to decline over time.

Accordingly, this harvest is a 12.5 acre clearcut with single large diameter oak reserve tree. Seeds from surrounding stands and sprouts from hardwood stumps are expected to provide ample regeneration. As

stated in the cutting plan, if regeneration response is deemed inadequate after five years, enrichment planting will be utilized to increase density.

Cultural Resources:

There are no known cultural resources in the harvest area. If any are located in the course of the harvest they will be protected, mapped, photographed, and reported to the DCR Archeologist.

Rare or Endangered Species:

NHESP has determined that state-listed sensitive species or habitats may exist within the northern portion of the harvest area and the adjacent high tension power line. The particular species make use of early successional habitat and are expected to benefit from its expansion in this harvest.

To protect them from unnecessary disturbance, detailed information regarding affected species and their locations is not included here. DWSP has coordinated with NHESP to gather recommendations to protect these species during the harvest. NHESP has reviewed the Forest Cutting Plan for this lot and determine that “based on details in the Plan and information in our database, the Division [of Fisheries and Wildlife] does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in Take (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act”.

FIGURES

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: 3/15/16)

For DCR Use Only:

File Number 104-33499-23 Case No. N/A
Date Rec'd 8/10/22 Nat. Hert. yes
Earliest Start 8/25/22 Pub. Dr. Wat. yes
River Basin Chicopee ACEC NO
Gen. Obj. LS

Site Information

Location

Town New Salem | Quabbin Lot 3173
Road Route 202 and Moosehorn Road
Acres 12.5 Proposed Start Date 9/8/2022
Vol. MBF 110.5 Vol. Cds. 137 Vol. Tons 132

Plan Preparer

Name Helen Johnson & Richard MacLean
Address DCR - DWSP Quabbin Section
485 Ware Rd
Town, State, Zip Belchertown, MA 01007
Phone (617) 733-2937
Type of Preparer LF & OT
*Mass. Forester License # 383 (Johnson)
*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR-DWSP, Quabbin Section
Mailing Address 485 Ware Road
Town, State, Zip Belchertown, MA 01007
Phone 413-213-7903
Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ *Case #
FSC ☐ CR ☐ CR Holder

Licensed Timber Harvester**

Name TBD
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

* Heritage - No Impact AL

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 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.
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

Figure 1: Forest Cutting Plan (continued)

Products to be Harvested*			
Species	Mbf/Cds		Mbf/Cds
White Pine	44.6	Red Maple	3.6
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	27.2
Hemlock	20.9	Black Oak	3.6
Spruce		White Oak	1.5
Other Sftwd.		Other Hdwd.	
White Ash	1.6	Total Mbf	110.5
Beech		Cordwood (Cds)	137
White Birch	0.9	SW Pulp (Tons)	132
B & Y Birch	6.6	HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

*Note: Volumes 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	WO			
Acres	12.5			
Landowner Objective	LT			
Designation of Trees	SB			
Type of Cut	CC			
Source of Regeneration	SE			

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 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.

Dan Clark
Digitally signed by Dan Clark
Date: 2022.08.09 07:03:20 -04'00'

Signature of landowner(s) _____ Date 8/8/2022

Determination and Status

Approved ☒ Disapproved ☐ Expires 8/10/24

Cutting Plan [Signature] 9-13-22
Signature of Service Forester/Director's Agent _____ Date _____

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

Amendment App 1 ☐ Dis 1 ☐ App 2 ☐ Dis 2 ☐ _____

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

Figure 1: Forest Cutting Plan (continued)

Forest Cutting Plan

Narrative Page (Effective Date: 3/15/16)

Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4.

Landowner

Town _____

File Number _____

BMPs

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

No tracked equipment, no whole tree chipping, and no downhill skidding/forwarding on power line due to erosion risk.

Stabilize skider/forwarder roads with slash or corduroy and maintain water bars on slopes 20% throughout operation.

Designation of Trees

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4. Additional narrative description may be added on a separate page.

[illegible]

Regeneration & Future Condition

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre
1	AD/CO/SE	Some advance regeneration is already in place; stump sprouting is expected, especially from hardwood saplings and the stan dshape will allow seeding in from adjacent mature forest.
1	POSSIBLE PL	If regeneration is inadequate in five years, enrichment planting will be utilized to increase density, perhaps including assisted migration of climate adapted species.

Stand No.

Desired Future Condition

Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory

	Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory to understory.
1	Vibrant early successional forest with diverse regeneration, with adjacent future clearcuts planned to maintain habitat.

Figure 1: Forest Cutting Plan (continued)



*Division of Water Supply Protection
Office of Watershed Management
Quabbin/Ware River Region*

RE: Lot 3173 Young Forest Focus Area FCP
Route 202 & Moosehorn Rd in New Salem

Stand 1 Narrative:

This 12.5 acre clearcut in a white pine/oak stand is the initial harvest in one of three Young Forest Focus Areas at the Quabbin Watershed, as described on pages 120-124 and shown in Figure 4-8 on the top of page 123 of the Massachusetts DCR Division of Water Supply Protection 2017 Land Management Plan. This harvest will be the first of a series of adjacent harvests, building off existing early successional habitat along a powerline right-of-way.

The purpose of DWSP's Young Forest Focus Areas is to create early successional habitat, which will be utilized by a range wildlife and plant species that are regionally uncommon. Multiple species of special concern utilize early successional/young forest habitat exclusively. In addition, many bird species make use of both young and mature forests; this harvest will create a young/mature forest interface utilized by such species.

The long-term plan for this area is initiate a new 10-14 acre patch of young forest every 3-5 years, each one adjacent to the last so that the available habitat shifts slowly across the landscape. Sources of regeneration for new stands will include existing seedlings (advance regeneration), seeds and sprouts, supplemented by planting if the site is not fully stocked within five years. No further silvicultural entries are planned for decades. This long time-cycle will provide ongoing critical habitat for declining species while minimizing long-term impacts to any individual site.



Charles D. Baker

Governor

Karyn E. Polito


Bethany A. Card, Secretary

Executive Office of Energy & Environmental Affairs

Doug Rice, Commissioner

Department of Conservation & Recreation

Figure 1: Forest Cutting Plan (continued)

 MASSWILDLIFE	DIVISION OF FISHERIES & WILDLIFE 1 Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 f: (508) 389-7890 MASS.GOV/MASSWILDLIFE
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Andrew Rawcliffe, Service Forester Department of Conservation and Recreation 40 Cold Storage Dr. P.O. Box 484 Amherst, MA 01004	Forest Cutting Plan No.: <u>FCP 204.33999.23</u> NHESP Tracking No.: <u>22-39891</u> Town: <u>New Salem</u> Road: <u>Rte 202 & Moosehorn Road</u> Landowner: <u>Commonwealth of MA – DCR</u> Preparer: <u>Helen Johnson</u> Date: <u>September 9, 2022</u>
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Dear Andrew,

The Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife ("the Division") has reviewed the above-referenced Forest Cutting Plan ("the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(6)). Based on details of the Plan and information in our database, the Division does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in Take (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). Therefore, the Division does not require that the Plan be modified at this time.

Please copy the Division on any proposed amendments to the Plan and on the approved plan for the site. If you have any questions regarding this letter, please contact Misty-Anne Marold, Senior Endangered Species Review Biologist, at misty-anne.marold@mass.gov or 508-389-6356.

Sincerely,


Everose Schlüter, Ph.D.
Assistant Director

Cc: New Salem Conservation Commission

MASSWILDLIFE

Figure 1: Forest Cutting Plan (continued)

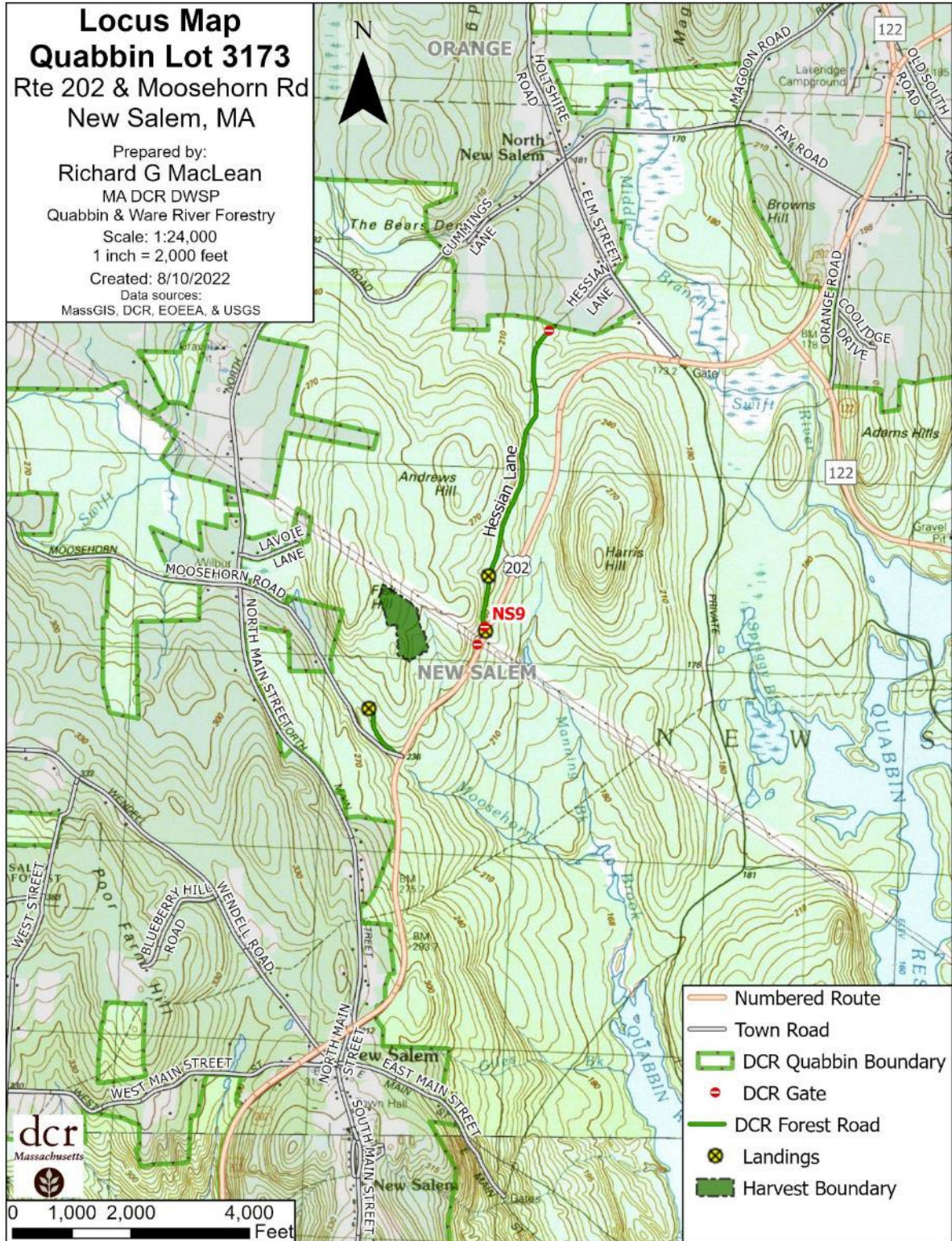


Figure 1: Forest Cutting Plan (continued)

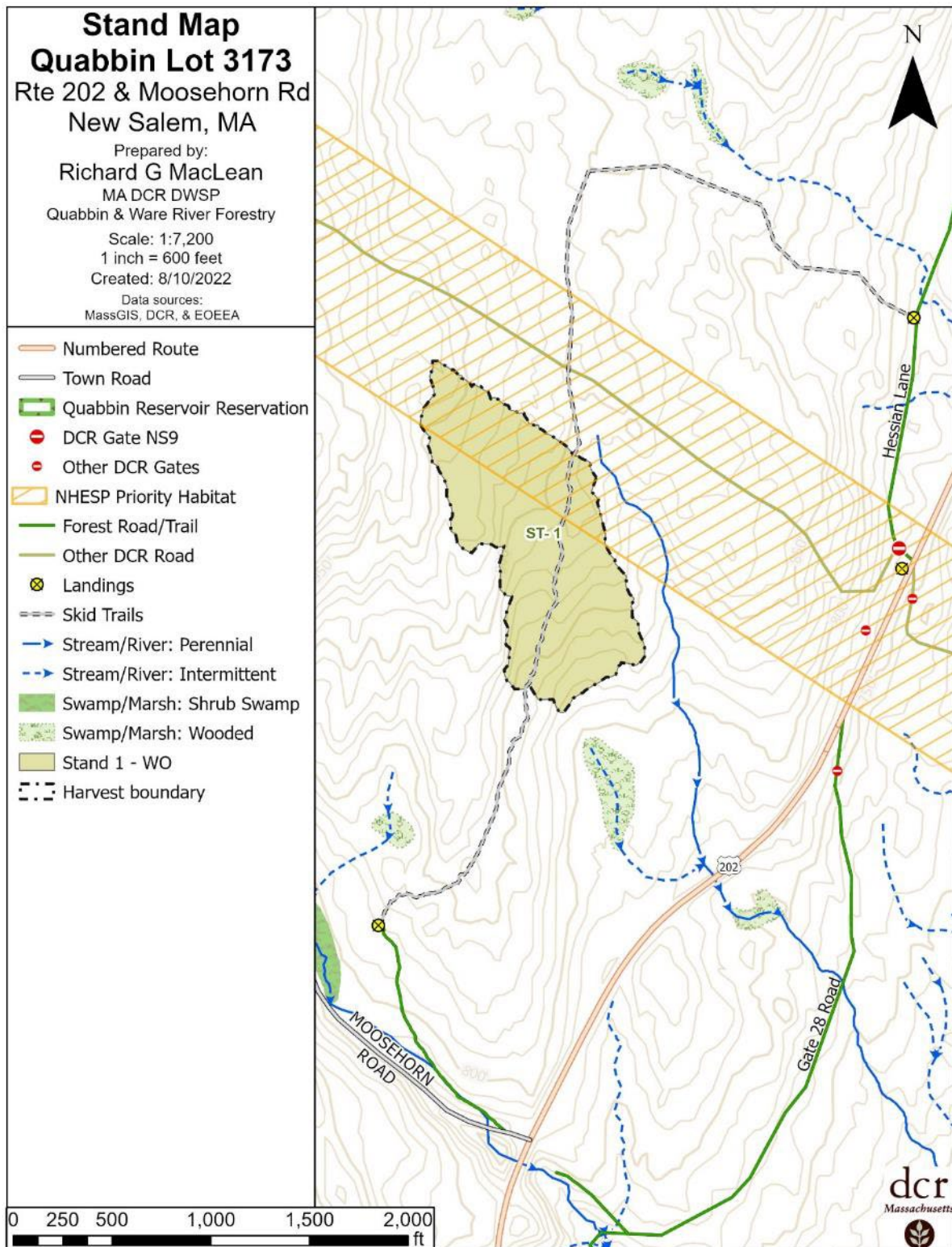




Figure 1: Forest Cutting Plan (continued)

dcrcr	COMMONWEALTH OF MASSACHUSETTS Department of Conservation and Recreation Division of State Parks and Recreation	FILE # 204-33999-23
		
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 <u>DCR-DWSP</u> <u>485 Ware Rd, Belchertown, MA</u> in accordance with the		
(Name of Owner) (Address) <u>01007</u>		
provision of M.G.L. Chapter 132, Section 40-46, filed in <u>Amherst F.O.</u> with the Dept. of Conservation		
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the		
<u>Quabbin 3773 lot, New Salem</u> <u>(aka 202 & Mooschohorn Rd)</u>		
Approval Date	<u>9/13/22</u>	ISSUED BY:
Director's Agent	<u>Andrew Rawcliffe</u>	
DCR Phone No.	<u>617-549-1677</u>	Priscilla E. Geigis, Director Division of State Parks and Recreation