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

Project Title: Prison Camp Rd/Elm St.

DWSP Harvest Permit Number: WR 4387	
DCR Forest Cutting Plan File Number: 257-7759-16	

Site Information

Watershed: Ware River	Town(s): Rutland
Acres: 20	Nearest Road: Elm St
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes
Forest Types: White pine, White pine/hardwood, spruce	ACEC?: No
Soils: Most of the lot is on 910C Woodbridge-Paxton, fine	sandy loam, extremely stony, moderately well-drained.
There is also 902E Charlton-Paxton association, extremely	stony, well drained.
Wetland Resources: Lot is adjacent to wetlands and the W	are River.
Vernal Pools: Yes	

Harvest Information

Harvest Start Date: 12/23/15	Harvest End Date: 1/22/16
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings	There are no stream crossings.
Filter Strips	There are no filter strips.
Wetland Crossings	There are no wetland crossings.
Harvesting in Wetlands	There is no harvesting in wetlands.

DWSP Forester supervising this harvest
Name: Kenneth W. Canfield
Forester License #: 431

Phone #: 508-882-3636 ext.1603

NARRATIVE

General Description/Forest Composition/History:

The overstory is mostly overmature, poorly formed white pine with mixed hardwood. There are patches of planted larch and spruce present as well. Species present are white pine, red maple, black cherry, European larch, white spruce, with scattered hemlock and red and white oak. The area has been harvested in the past, which created gaps in the overstory and established diverse regeneration consisting mostly of white pine, red maple, and oak.

Invasive barberry and buckthorn are present, but being out competed by established native regeneration.

The soil is moderately well drained.

Site Selection:

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. In order to achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large mature trees). In addition, the forest should be vigorous; actively growing and regenerating. A forest in this condition is resilient to and quickly recovers from small and large scale disturbances such as disease, insect infestation, ice storms and hurricanes.

Silvicultural Objectives:

The main purpose of this harvest is to diversify and regenerate the forest, and remove non-native and poorly formed trees. Small (up to $1/3^{rd}$ of an acre) groups of trees will be removed, generally in areas where the trees have the lowest vigor and poorest form, where diverse regeneration is present, and where non – native overstory trees dominate.

This treatment should increase the diversity of species and will increase the age and structural diversity of the forest as a whole.

Cultural Resources:

This land has been determined to not be culturally or archeologically sensitive based on a review by the DCR Archaeologist. Standard practice dictates that every effort is made to avoid disturbing stone walls. There are multiple walls on this lot that will need to be crossed. Existing barways will be used to cross walls, but will need to be widened due to the size of modern harvesting equipment.

Wildlife/Rare or Endangered Species:

There is one known vernal pool adjacent to the harvest area. The vernal pool has been mapped and buffered from timber harvesting to provide adequate protection to the species that utilize it, and in accordance with the Massachusetts Forestry Best Management Practices Manual and the Division of Water Supply Protection Comprehensive Land Management Plan.

A variety of wildlife such as deer, turkey, coyote and moose are known to frequent the lot and beaver and otter are in adjacent wetlands. Most snags and trees with stick nests, dens or unusual wildlife habitat characteristics will be retained.

FIGURES

Figure 1 Final Forest Cutting Plan

- Figure 2 Pre-Harvest photograph from marked photo point 1, taken 10/20/15
- Figure 3 A & B Post-Harvest photographs from marked photo points 1 and 2, taken 12/13/15
- Figure 4 A & B After one growing season photographs from marked photo points 1 and 2, taken 7/27/16
- Figure 5 A & B After two growing seasons photographs from marked points 1 and 2, taken 7/17/17

Town Oakham					Landowner				
Town Oakham									
Toma Outstan				-	Name DCR Divi	sion of Wa	ter Suppl	v Protec	tion
Road Coldbrook R	d	-			Mailing Address 485	Ware Rd			
Acres 23	Propo	osed Start	Date	12/1/15					
Vol. MBF 31.5 Vo	ol. Cds. 10	05 V	ol. Ton	s <u>330</u>	Town, State, Zip Bel	chertown,	MA 0100	7	_
) 323 - 692		_	
Plan Preparer					Ch61 61A 61E				
			-		CR CR Holder	1	-		_
Name Kenneth W					Licensed Timbe	r Harve	ster**		
Address DCR Divi			y Protec	tion	•		-		
578 Old To			_		Name				
Town, State, Zip Oakh Phone (508)) 882 – 363		12		Address Town, State, Zip				
Type of Preparer Mass					Phone				
*Mass. Forester License		Forester		_	Mass. Lic. Harvester #				
*Required for land unde		61A or E	arest St	ewardship	**This information may be		the plan is	approved,	but
			20220 20		work begins,				
1		_			der of Burst				
Stream Crossing	IS				Harvesting in	Wetlan	ds		
1	JS SC-1	SC-2	SC-3	SC-4		Wetlan	ds HW-2	HW-3	H
Stream Crossing		SC-2	SC-3	SC-4	Harvesting in	-	-	HW-3	H
Stream Crossing		SC-2	SC-3	SC-4	Harvesting in Indicate location on map Forest Type (see pg 2) Acres to be Harvested	-	-	HW-3	H
Stream Crossing Indicate location on map Type of Crossing Existing Structure Type of Bottom		SC-2	SC-3	SC-4	Harvesting in Indicate location on map Forest Type (see pg 2) Acres to be Harvested Resid. Basal Area	-	-	HW-3	H
Stream Crossing Indicate location on map Type of Crossing Existing Structure Type of Bottom Bank Height (ft)		SC-2	SC-3	SC-4	Harvesting in Indicate location on map Forest Type (see pg 2) Acres to be Harvested	-	-	HW-3	H
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Species	Mbf/Cds		Mbf/Cds
White Pine	3.9 M	Red Maple	
Red Pine	21.6 M	Sugar Maple	
Pitch Pine		Red Oak	4.8 M
Hemlock		Black Oak	0.9 M
Spruce		White Oak	0.3 M
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	31.5
Beech		Cordwood (Cds)	105
White Birch		SW Pulp (Tons)	330
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

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*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	RP	WO	OM		
Acres	1,	18.6	2.9		
Landowner Objective	LT	LT	LT		
Designation of Trees	CT	CT	CT		
Type of Cut	SA	SE	SE		
Source of Regeneration	SE	SE	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.

Disapproved

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Approved

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Signature of Service Forester/Director's Agent

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Forestei

Service

Cutting Plan

Extension

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.

11/24/2015

Ser. For. Ints.

Date

I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

Expires

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.

11-6-18 Date Signature of landowner(s) **Determination and Status**

Final Report and Comments

Expires	I hereby certify that the afore described Forest Cu and all relevant statutes have been substantially or	
11 19 2017	tan	3/22/2016

Signature of Service Forester/Director's Agent

Date

Am	endment			App								
Fore	st Types				1.4.35	Des	ignation of Trees	Type	e of Cul			Source of Regeneration
WP	White Pine	HK	Hemlock	OM	Mixed Oak	CT	Cut Tree	SH	Shelterwood	Inte	ermediate Harvests;	AD Advanced
WK	WP/Hem	HH	Hem/Hdwd	RM	Red Maple	LT	Leave Tree	ST	Seed Tree	CT	Commercial Thin	SE Natural Seed
WH	WP/Hdwd	BC	Blck Cherry	BE	Beech	SB	Stand Boundary	CC	Clear Cut	NT	Non Com Thin	PL Plant
WO	WP/Oak	BB	Bee/Bit/Map	SF	Spruce/Fir	OT	Other	SE	Selection	Not	-Standard Systems:*	CO Coppice
RP	Red Pine	OH	Oak/Hdwd	SM	Sugar Maple	Lan	downer Objective	SA	Salvage	HG	Highgrade*	DS Direct Seed
SR	Red Spruce	OR	N Red Oak	PP	Pitch Pine	LT	Long-term Mgt	SN	Sanitation	DL	Diameter Limit*	OT Other
						ST	Short-term Har.			OT	Other*	

Use thi	s page to prov	(Effective Date: 1/1/0 ide further explanation	l or íf	Town	Rutland
Other (OT) was used	In any category on page	ges 3 or 4.	File Numbe	ä.
Use this :	Section to provide for	rther explanation or if Other (OT)	was used in any	category in the Best Managen	nent Practices Section on Pag
		ing low quality or declining white			
to 1/3 acr	e in size. Frees marki	ed with blue paint are to be cut. T	rees marked with) orange paint or unmarked ar	e to be Jefi.
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} . υ	se this Section to des	cribe the types of trees to be harw	ested and/or retain	ned if Other (OT) was used fo	r "Designation of Trees"
2			Treatment Section	On page 4. Quality of Trees to be Ct	
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dcr Ø	COMMONWEALTH OF MASSACHUSETTS Department of Conservation and Recreation Division of State Parks and Recreation	FILE # 257-7759-16
FORES	T CUTTING PLAN CERTIFIC	ATE
	onspicuous place within the area in which the harvesting operation that DWSPIDCR 578 OU TUR (Name of Owner) (Address)	mpike RA
provision of M. and Recreation, Ivicon C.	G.L. Chapter 132, Section 40-46, filed in <u>Chinton</u> Division of State Parks and Recreation, a Notice of Intent to cut Amp lot.	with the Dept. of Conservation forest products upon the
Approval Date Director's Agent DCR Phone No	Kate Marquís (413)992-8734 Pris	IED BY: Sach Jug- tilla E. Geigls, Director sion of State Parks and Recreation

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Figure 2. Pre-Harvest photograph from marked photo point 1, taken 10/20/15



Figure 3 A & B. Post-Harvest photographs from marked photo points 1 and 2, taken 12/13/15

A. Photograph from marked point 1, looking north, road can barely be seen on left edge of photo, taken 12/13/15



B. Photograph from marked point 2, looking northeast, taken 12/13/15



Figure 4 A & B. After one growing season photographs from marked photo points 1 and 2, taken 7/27/16

A. Photograph from marked point 1, looking north, road can barely be seen on left edge of photo, taken 7/27/16



B. Photograph from marked point 2, looking northeast, taken 7/27/16



Figure 5 A & B After two growing seasons photographs from marked points 1 and 2, taken 7/17/17

A. Photograph from marked point 1, looking north, road can barely be seen on left edge of photo, taken 7/17/17



B. Photograph from marked point 2, looking northeast, taken 7/17/17

