

PAYABLE TO:  
MAIL TO:

**Town of Averill**  
Unified Towns and Gores  
P. O. Box 417  
Island Pond, Vermont 05846  
1-802-723-5900

This is the only tax bill you will receive.

**TAX BILL**

PARCEL ID	BILL DATE	TAX YEAR
100011.2	08/29/2012	2012

Taxes unpaid after the due date are delinquent. Maximum interest as allowable by law will be charged in addition to the collectors fee of 8%. Postmarks are NOT accepted as timely payment.

Location:  
Location:

SPAN # 020-255-10079 SCL CODE: 255  
TOTAL PARCEL ACRES 14,653.00

OWNER PLUM CREEK MAINE TIMBERLANDS LLC  
ATTN TAX COORDINATOR  
P O BOX 1109  
LEWISBURG WV 24901

FOR INCOME TAX PURPOSES

ASSESSED VALUE		NON RESIDENTIAL	
REAL	3,883,100		3,883,100
EXEMPTION			
LAND USE	- 2,270,300		- 2,270,300
TOTAL TAXABLE VALUE	1,612,800		1,612,800
GRAND LIST VALUES	16,128.00		16,128.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pvredtaxrates.shtml">www.state.vt.us/tax/pvredtaxrates.shtml</a>		TAX RATE NAME	TAX RATE x GRAND LIST = TAXES
		Municipal	0.1703 x16,128.00= 2746.59
		NON RESIDENTIAL EDUCATION	1.2560 x16,128.00= 20256.77
		<b>TOTAL TAX STATE PAYMENTS</b>	23003.36
1ST PAYMENT 10/15/2012	11501.68	2ND PAYMENT 04/15/2013	11501.68
		<b>NET TAX DUE</b>	23003.36

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

Town of Averill  
TAX YEAR 2012

1ST PAYMENT DUE	
10/15/2012	
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
100011.2	
AMOUNT DUE	11501.68
AMOUNT PAID	

This is the only tax bill you will receive. Please send email address with first payment if you wish to receive a reminder when 2nd payment is due.

Town of Averill  
TAX YEAR 2012

2ND PAYMENT DUE	
04/15/2013	
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
100011.2	
AMOUNT DUE	11501.68
AMOUNT PAID	

This is the only tax bill you will receive. Please send email address with first payment if you wish to receive a reminder when 2nd payment is due.

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# 1

PAYABLE TO:  
MAIL TO:

**Town of Avery's Gore**  
Unified Towns and Gores  
P. O. Box 417  
Island Pond, Vermont 05846  
1-802-723-5900

This is the only tax bill you will receive.

**TAX BILL**

PARCEL ID	BILL DATE	TAX YEAR
100099.9	08/29/2012	2012

Taxes unpaid after the due date are delinquent. Maximum interest as allowable by law will be charged in addition to the collectors fee of 8%. Postmarks are NOT accepted as timely payment.

Location:  
Location:

SPAN # 022-256-10002 SCL CODE: 256  
TOTAL PARCEL ACRES 8,238.00

OWNER PLUM CREEK MAINE TIMBERLANDS LLC  
ATTN TAX COORDINATOR  
P O BOX 1109  
LEWISBURG WV 24901

FOR INCOME TAX PURPOSES

ASSESSED VALUE		NON RESIDENTIAL	
REAL EXEMPTION	2,183,100		2,183,100
LAND USE	- 1,318,000		- 1,318,000
TOTAL TAXABLE VALUE	865,100		865,100
GRAND LIST VALUES	8,651.00		8,651.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pvredtaxrates.shtml">www.state.vt.us/tax/pvredtaxrates.shtml</a>	TAX RATE NAME	TAX RATE x GRAND LIST =	TAXES
	Municipal	0.1703 x 8,651.00 =	1473.27
	NON RESIDENTIAL EDUCATION	1.3600 x 8,651.00 =	11765.36
TOTAL TAX STATE PAYMENTS			13238.63
1ST PAYMENT 10/15/2012	2ND PAYMENT 04/15/2013	NET TAX DUE	
6619.32	6619.31	13238.63	

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

Town of Avery's Gore  
TAX YEAR 2012

1ST PAYMENT DUE	
10/15/2012	
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
100099.9	
AMOUNT DUE	6619.32
AMOUNT PAID	

This is the only tax bill you will receive. Please send email address with first payment if you wish to receive a reminder when 2nd payment is due.

Town of Avery's Gore  
TAX YEAR 2012

2ND PAYMENT DUE	
04/15/2013	
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
100099.9	
AMOUNT DUE	6619.31
AMOUNT PAID	

This is the only tax bill you will receive. Please send email address with first payment if you wish to receive a reminder when 2nd payment is due.

#2

PAYABLE TO:  
MAIL TO:

# 2012 BLOOMFIELD TAX BILL

TOWN OF BLOOMFIELD  
P O BOX 336  
N STRATFORD NH 03590

This is the only bill you will receive. Please forward to new owner if property is sold.

## TAX BILL

PARCEL ID	BILL DATE	TAX YEAR
1102.	07/26/2012	2012

Taxes unpaid after the due date are delinquent. Maximum interest as allowable by law will be charge in addition to collectors fee of 8%. Postmarks are accepted as timely payment.

SPAN # 066-020-10090      SCL CODE: 020  
TOTAL PARCEL ACRES              9,370.00

FOR INCOME TAX PURPOSES

OWNER      PLUM CREEK MAINE TIMBERLANDS LLC  
9999 3RD AVENUE SUITE 4300  
SEATTLE WA 98104

ASSESSED VALUE		NON RESIDENTIAL
REAL	2,492,400	2,492,400
EXEMPTION		
LAND USE	- 1,225,700	- 1,225,700
TOTAL TAXABLE VALUE	1,266,700	1,266,700
GRAND LIST VALUES	12,667.00	12,667.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pvr2012taxrates.shtml">www.state.vt.us/tax/pvr2012taxrates.shtml</a>	TAX RATE NAME	TAX RATE x GRAND LIST = TAXES
	TOWN	0.2010      x12,667.00=      2546.07
	HIGHWAY	0.1200      x12,667.00=      1,520.04
	NON RESIDENTIAL EDUCATION	1.3490      x12,667.00=      17087.78
PAYMENT	10/15/2012	TOTAL TAX      21153.89
DUE	21153.89	STATE PAYMENTS
		<b>NET TAX DUE      21153.89</b>

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

### 2012 BLOOMFIELD TAX BILL

PAYMENT DUE	TAX YEAR
10/15/2012	2012
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
1102-	
AMOUNT DUE	21153.89
AMOUNT PAID	

# 3

PAYABLE TO:  
MAIL TO:

# Town Of Brighton 2012

P. O. BOX 377  
Island Pond  
Vermont 05846  
802-723-4405

Please forward to new owner  
if property is sold.

## TAX BILL

PARCEL ID	BILL DATE	TAX YEAR
00TR25.09R	07/19/2012	2012

Taxes unpaid after the due date are delinquent. Maximum interest as allowable by law will be charge in addition to collectors fee of 8%. Postmarks are NOT accepted as timely payment.

Description: WOODLAND  
Location: HENSHAW RD

SPAN # 090-028-10364 SCL CODE: 028  
TOTAL PARCEL ACRES 5,275.00

OWNER PLUM CREEK MAINE TIMBERLANDS LLC  
999 THIRD AVE, SUITE 4300  
SEATTLE WA 98104

FOR INCOME TAX PURPOSES

ASSESSED VALUE	NON RESIDENTIAL
REAL ESTATE 1,061,600	1,061,600
EXEMPTION	
LAND USE 485,500	485,500
TOTAL TAXABLE VALUE 576,100	576,100
GRAND LIST VALUES 5,761.00	5,761.00

For more information about how education tax rates are determined, go online to: [www.state.vt.us/tax/pvredtaxrates.shtml](http://www.state.vt.us/tax/pvredtaxrates.shtml)

TAX RATE NAME	TAX RATE x	GRAND LIST =	TAXES
TOWN	0.4087	x5,761.00=	2354.52
HIGHWAY	0.1574	x5,761.00=	906.78
local agreement	0.0026	x5,761.00=	14.98
NON RESIDENTIAL EDUCATION	1.3253	x5,761.00=	7635.05

1st Payment	2nd Payment	3rd Payment	TOTAL TAX
08/18/2012	09/18/2012	11/18/2012	10911.33
3637.11	3637.11	3637.11	NET TAX DUE 10911.33

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

Town Of Brighton 2012  
TAX YEAR 2012

Town Of Brighton 2012  
TAX YEAR 2012

Town Of Brighton 2012  
TAX YEAR 2012

1ST PAYMENT DUE	
08/18/2012	
OWNER NAME	
PLUM CREEK MAINE	
PARCEL ID	
00TR25.09R	
AMOUNT DUE	3637.11
AMOUNT PAID	

2ND PAYMENT DUE	
09/18/2012	
OWNER NAME	
PLUM CREEK MAINE	
PARCEL ID	
00TR25.09R	
AMOUNT DUE	3637.11
AMOUNT PAID	

3RD PAYMENT DUE	
11/18/2012	
OWNER NAME	
PLUM CREEK MAINE	
PARCEL ID	
00TR25.09R	
AMOUNT DUE	3637.11
AMOUNT PAID	

# 4

PAYABLE TO:

MAIL TO:

# Town of Brunswick

994 VT Rte 102  
Brunswick, Vermont 05905

## TAX BILL

802-962-5514

This is the only bill being sent. Please forward to new owner if property is sold.

PARCEL ID	BILL DATE	TAX YEAR
0509516.	08/03/2012	2012

2% discount if paid on or before Oct. 1, 2012. 8% penalty added if not paid by Nov. 1. 1% interest per month starting Dec. 1, 2012 on unpaid taxes. Postmarks are accepted as timely payment.

OWNER  
PLUM CREEK MAINE TIMBERLANDS, LLC  
ATTN: TAX COORDINATOR  
PO BOX 1109  
LEWISBURG WV 24901

SPAN # 105-033-10027 SCL CODE: 033  
TOTAL PARCEL ACRES 2,277.00

FOR INCOME TAX PURPOSES

ASSESSED VALUE		NON RESIDENTIAL	
REAL	546,500		546,500
EXEMPTION			
LAND USE	- 307,200	-	307,200
TOTAL TAXABLE VALUE	239,300		239,300
GRAND LIST VALUES	2,393.00		2,393.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pvredtaxrates.shtml">www.state.vt.us/tax/pvredtaxrates.shtml</a>	TAX RATE NAME	TAX RATE x GRAND LIST =	TAXES
	MUNICIPAL	0.0917 x2,393.00=	219.44
	NON RESIDENTIAL EDUCATION	1.4083 x2,393.00=	3370.06
PAYMENT 11/01/2012		TOTAL TAX 3589.50	
DUE 3589.50		STATE PAYMENTS	
		NET TAX DUE 3589.50	

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

### Town of Brunswick

PAYMENT DUE		TAX YEAR
11/01/2012		2012
OWNER NAME		
PLUM CREEK MAINE TIMBERLANDS, LLC		
PARCEL ID		
050 9516.		
AMOUNT DUE	3589.50	
AMOUNT PAID		

# 5

PAYABLE TO:  
MAIL TO:

**Town of Lemington**  
2549 River Rd., VT 102  
Lemington, VT 05903

This is the only bill you will receive. Please, forward to new owner if property is sold.

**TAX BILL**

(802)277-4814

PARCEL ID	BILL DATE	TAX YEAR
00000000R8.14	10/01/2012	2012

Taxes unpaid after the due date are delinquent. Maximum interest as allowable by law will be charge in addition to collector's fee of 8%. Postmarks are NOT accepted as timely payment.

Description: LAND ONLY  
Location: RT 102

SPAN # 348-108-10039 SCL CODE: 108  
TOTAL PARCEL ACRES 9,913.00

OWNER PLUM CREEK MAINE TIMBERLANDS, LLC  
ATTN TAX COORDINATOR  
P O BOX 1109  
LEWISBURG WV 24901

FOR INCOME TAX PURPOSES

ASSESSED VALUE		NON RESIDENTIAL	
REAL	2,733,700		2,733,700
EXEMPTION			
LAND USE	- 1,741,700		- 1,741,700
TOTAL TAXABLE VALUE	992,000		992,000
GRAND LIST VALUES	9,920.00		9,920.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pyredtaxrates.shtml">www.state.vt.us/tax/pyredtaxrates.shtml</a>	TAX RATE NAME	TAX RATE x GRAND LIST =	TAXES
	Town General	0.1609 x9,920.00=	1596.13
	Town Highway	0.1246 x9,920.00=	1,236.03
	NON RESIDENTIAL EDUCATION	1.3938 x9,920.00=	13826.50
PAYMENT	12/05/2012	TOTAL TAX	16658.66
DUE	16658.66	STATE PAYMENTS	
		NET TAX DUE	16658.66

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

**Town of Lemington**

PAYMENT DUE	TAX YEAR
12/05/2012	2012
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS, LLC	
PARCEL ID	
00000000R8-14	
AMOUNT DUE	16658.66
AMOUNT PAID	

TOWN HALL HOURS:  
Wednesdays  
2:30-5:30

If you wish a receipt, please, enclose a self-addressed, stamped envelope.

PAYABLE TO:  
MAIL TO:

**Town of Lewis**  
Unified Towns and Gores  
P. O. Box 417  
Island Pond, Vermont 05846  
1-802-723-5900

This is the only tax bill you will receive.

**TAX BILL**

PARCEL ID	BILL DATE	TAX YEAR
100011.4	08/29/2012	2012

Taxes unpaid after the due date are delinquent. Maximum interest as allowable by law will be charged in addition to the collectors fee of 8%. Postmarks are NOT accepted as timely payment.

Location:  
Location:

SPAN # 351-259-10008 SCL CODE: 259  
TOTAL PARCEL ACRES 6,697.00

OWNER PLUM CREEK MAINE TIMBERLANDS LLC  
ATTN TAX COORDINATOR  
P O BOX 1109  
LEWISBURG WV 24901

FOR INCOME TAX PURPOSES

ASSESSED VALUE		NON RESIDENTIAL	
REAL	1,774,700		1,774,700
EXEMPTION			
LAND USE	- 990,000		- 990,000
TOTAL TAXABLE VALUE	784,700		784,700
GRAND LIST VALUES	7,847.00		7,847.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pvredtaxrates.shtml">www.state.vt.us/tax/pvredtaxrates.shtml</a>	TAX RATE NAME	TAX RATE x GRAND LIST =	TAXES
	Municipal	0.1703 x 7,847.00 =	1336.33
	NON RESIDENTIAL EDUCATION	1.3684 x 7,847.00 =	10737.83
1ST PAYMENT	10/15/2012	2ND PAYMENT	04/15/2013
6037.08		6037.08	
TOTAL TAX STATE PAYMENTS			12074.16
NET TAX DUE			12074.16

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

Town of Lewis  
TAX YEAR 2012

1ST PAYMENT DUE	
10/15/2012	
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
100011.4	
AMOUNT DUE	6037.08
AMOUNT PAID	

This is the only tax bill you will receive. Please send email address with first payment if you wish to receive a reminder when 2nd payment is due.

Town of Lewis  
TAX YEAR 2012

2ND PAYMENT DUE	
04/15/2013	
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
100011.4	
AMOUNT DUE	6037.08
AMOUNT PAID	

This is the only tax bill you will receive. Please send email address with first payment if you wish to receive a reminder when 2nd payment is due.

#7

PAYABLE TO:  
MAIL TO:

**Town of Morgan**  
P.O. Box 45  
Morgan Vt 05853

Please forward to NEW owner if you have sold since 04/01/2012

**TAX BILL**

(802) 895-2927

PARCEL ID	BILL DATE	TAX YEAR
800-2526.07	08/22/2012	2012

Taxes unpaid after the due date are del. Max int as allowed by law of 1% will be charged in addition to collectors fee of 8%. POSTMARK IS NOT FOR TIMELY PMT/POST DATED CHKS NOT EXCEPTED & RETURNED.

OWNER  
PLUM CREEK MAINE TIMBERLANDS LLC  
999 THIRD AVE  
SUITE 4300  
SEATTLE WA 98104

SPAN # 411-128-10241 SCL CODE: 128  
TOTAL PARCEL ACRES 503.00

FOR INCOME TAX PURPOSES

ASSESSED VALUE		NON RESIDENTIAL	
REAL	177,300		177,300
EXEMPTION			
LAND USE	93,700		93,700
TOTAL TAXABLE VALUE	83,600		83,600
GRAND LIST VALUES	836.00		836.00
For more information about how education tax rates are determined, go online to: <a href="http://www.state.vt.us/tax/pvredtaxrates.shtml">www.state.vt.us/tax/pvredtaxrates.shtml</a>	TAX RATE NAME	TAX RATE x GRAND LIST =	TAXES
	General	0.1274 x836.00=	106.51
	Highway	0.1231 x836.00=	102.91
	Cemeteries	0.0052 x836.00=	4.35
	Appropriations	0.0043 x836.00=	3.59
	Veterans Exempt	0.0006 x836.00=	0.50
	Sheriff's Dept.	0.0058 x836.00=	4.85
NON RESIDENTIAL EDUCATION	1.2302 x836.00=	1028.45	
PAYMENT	10/25/2012	TOTAL TAX	1251.16
DUE	1251.16	STATE PAYMENTS	
		<b>NET TAX DUE</b>	<b>1251.16</b>

DETACH THE STUBS BELOW AND RETURN WITH YOUR PAYMENT

Town of Morgan

PAYMENT DUE	TAX YEAR
10/25/2012	2012
OWNER NAME	
PLUM CREEK MAINE TIMBERLANDS LLC	
PARCEL ID	
800-2526.07	
AMOUNT DUE	1251.16
AMOUNT PAID	

The 2012 property taxes for the Town of Morgan as voted are in my hands for collection. PAYMENT MUST BE RECEIVED BY 10/25/2012 no later then 4:00 p.m. on this day.

# 8



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Home Resources & Media SFI Standard Labels & Claims Audits & Reports Blog

Annual Conference

Home » Standards and Certifications » Introduction to the Standard

Introduction to the Standard

Standards Archive

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Standard Development Process

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SFI Standard

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Chain of Custody Requirements

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Fiber Sourcing Requirements

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Labels & Claims

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Independent Certification Bodies

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Complaints

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Accreditation of Independent Certification Bodies

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American Tree Farm System

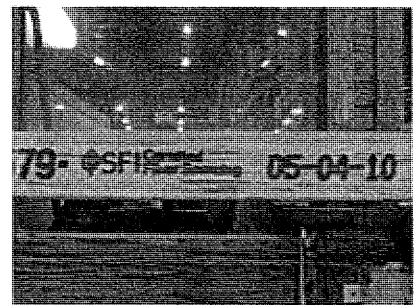
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PEFC

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## Introduction to the Standard

The SFI 2010-2014 Standard promotes sustainable forest management in North America through 14 core principles that promote sustainable forest management, including measures to protect water quality, biodiversity, wildlife habitat, species at risk, and Forests with Exceptional Conservation Value. There are also 20 objectives, 38 performance measures and 115 indicators, developed by professional foresters, conservationists, scientists and others.



The standard, the outcome of an 18-month public review process, took effect on Jan. 1, 2010 and includes revisions that:

- improve conservation of biodiversity in North America and offshore
- address emerging issues such as climate change and bioenergy
- strengthen unique SFI certified sourcing requirements

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complement SFI activities aimed at avoiding controversial or illegal offshore fiber sources  
expand requirements for logger training and support for trained loggers and certified logger programs

To be certified, forest operations must be third-party audited to the standard's requirements by independent, objective and accredited certification bodies. The SFI program is also committed to continuously improve responsible forest management.

SFI program participants must meet or exceed applicable water quality laws and regulations, with measures to manage and protect water bodies and riparian zones on certified lands. They must continually evaluate habitat and biodiversity impacts from forest activities – this leads to improved habitat quality, and protection of imperiled or critically imperiled species.

SFI program participants must comply with the comprehensive forestry laws that apply to them in the United States and Canada. They must practice responsible forestry on their certified lands, as well as promote best management practices, awareness and training if they procure wood from lands in North America that are not certified.

The SFI program is committed to improving the practice of forestry on all forestlands in North America, whether boreal forests or plantation forests, whether naturally regenerated or planted. Its philosophy is that healthy, productive forests yield immense environmental, social and economic benefits, and mitigate the impacts of climate change by absorbing and storing carbon in trees, soil and biomass. Forestland being converted to other uses could not be certified to the SFI Standard because it would not meet the requirement calling for prompt reforestation after the final harvest.

The SFI Standard is reviewed through an open public process every five years so it can incorporate the latest scientific information and respond to emerging issues. The review leading to the SFI 2010-2014 Standard included two public comment periods and seven regional workshops.

## **Documents:**

SFI Requirements: Section 2 - SFI 2010-2014 Standard  
Requirements for the 2010-2014 SFI Program- full package (Francais)  
Summary of Significant Changes in SFI 2010-2014 Standard  
Interpretations for the Requirements for the SFI 2010-2014 Program  
Press Release: SFI Inc. Launches New Standard  
SFI Program Participants  
Program participants with forest certification  
Frequently Asked Questions on the SFI 2010-2014 Program

ACCEPTABLE MANAGEMENT  
PRACTICES FOR MAINTAINING

18

# Water Quality

ON LOGGING JOBS  
IN VERMONT

*10th Printing 2009*

Effective Date August 15, 1987  
Copies Available in Print or On-line  
[www.vfpr.org/resource/for\\_forres\\_acceptman.cfm](http://www.vfpr.org/resource/for_forres_acceptman.cfm)

Department of Forests, Parks, and Recreation  
103 S. Main St., Bldg. 10 South  
Waterbury, VT 05671-0602  
[www.vtfpr.org](http://www.vtfpr.org)

This document available upon request in  
Braille, Large Print, and Audio Cassette.  
VT TDD Relay 1-800-253-0191

Printed on Recycled Paper (08/06 vga)

References.....40  
Appendix I – Vermont Laws.....42  
    A. Laws and Regulations  
        Affecting Logging  
        Operations.....42  
    B. Forest Property Tax Laws.....48

1. A violation occurs only if there is a discharge. If no discharge occurs, the logger or landowner cannot be fined or prosecuted for not having the AMP's in place.
2. If there is a discharge and the AMP's are properly in place, there is no violation.
3. If there is a discharge and the AMP's have not been followed, there is a violation.
4. "Slash", that is, branches, bark or pieces of wood in a stream or other water body are automatically considered a violation, except for temporary "brushing in" of streams during frozen conditions.
5. In cases where for some reason the AMP's cannot be applied, and it is uncertain that discharges can then be prevented, there is a legal alternative: a landowner or logger can apply to the Department of Environmental Conservation for a discharge permit. It is likely, however, that permits will be granted only in extraordinary circumstances.

In summary, a logger or landowner is liable to legal action only when a discharge takes place and either no permit has been obtained or the AMP's have not been followed. Thus, the AMP's are not only basic to sound forestry, they also legally protect the logger or landowner during and after timber harvesting.

Loggers and landowners who cause discharges of sediment or other pollution from logging jobs and who have not followed either AMP's or conditions of a permit may be subject to enforcement action,

Regular inspection of all roads and prompt corrective and preventive action to avoid erosion and pollution problems is part of a high quality logging operation. Soil erosion from logging activity can be controlled by applying AMP's in this handbook during and after logging.

When questions arise concerning the proper application of these practices, technical assistance is available from the Department of Forests, Parks and Recreation (See page 38).

## Practices to be Applied During Logging

### Truck Roads

1. Steep pitches (greater than 10% on permanent truck roads shall not exceed 300 feet in length.

Truck roads take logs from a landing; skid trails bring logs to a landing.

A permanent road is defined as a road that will be continuously passable as access to a parcel of land. Bridges and culverts on permanent roads will usually be left in place and regularly maintained. A temporary road is defined as a road constructed for purposes of one-time access to a log landing which will receive minimal or no use after the logging operation. Bridges and culverts on temporary roads will be removed at the conclusion of the logging operation and stream banks will be permanently stabilized.



2. Road surfaces shall be adequately drained. Ditches shall be used to divert water away from the road surface. Where it is necessary to prevent an excessive accumulation of ditch water volume or to bring water under the road on road grades greater than 10 percent, pole culverts or metal culverts shall be used. Broad based dips can be used instead of culverts to relieve ditches or to bring water across the road when road grades are less than 10 percent. Drainage structures shall be installed with a gradient (slope from the uphill side of the structure to the outlet) of at least 4 degrees when ledge and rock permit and kept free of debris. Drainage structures shall be spaced according to Table I where conditions permit.

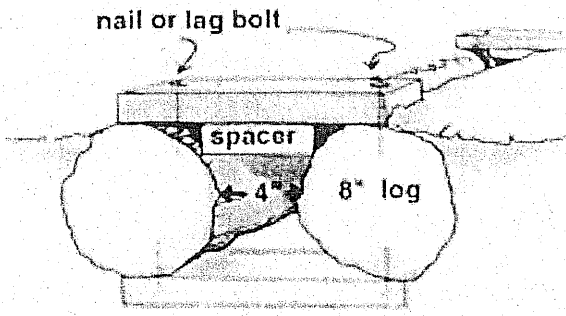


Figure 2: Proper Construction of Pole Culverts on Logging Roads.

- Broad-based dips (Figures 3 and 4) can be used where no streams cross the road and where the road grade is less than 10 percent.
- Broad-based dips are easier to maintain and more permanent than pole culverts but their proper construction requires a trained bulldozer operator. The dips should be installed before a major hauling use and should be spaced the same as pole culverts.

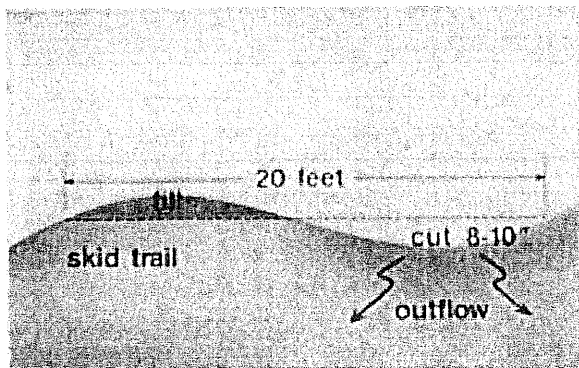


Figure 4: Specifications for the Construction of Standard Drainage Dips Used During Logging.

3. Water entering a roadway shall be moved under or away from the roadway before gaining sufficient flow and velocity to erode ditches. Spacing of culverts used for ditch drainage shall be determined according to Table 1. Culverts used for ditch drainage shall be at least 15 inches in diameter and sized according to Table 2.

should be used where heavy road use is anticipated during or after logging. Culverts should be installed at a 30 degree angle down grade, should angle downhill at least 4 degrees when ledge and rock permit for self-cleaning and should outlet onto stone rip-rap, gravel or logs.

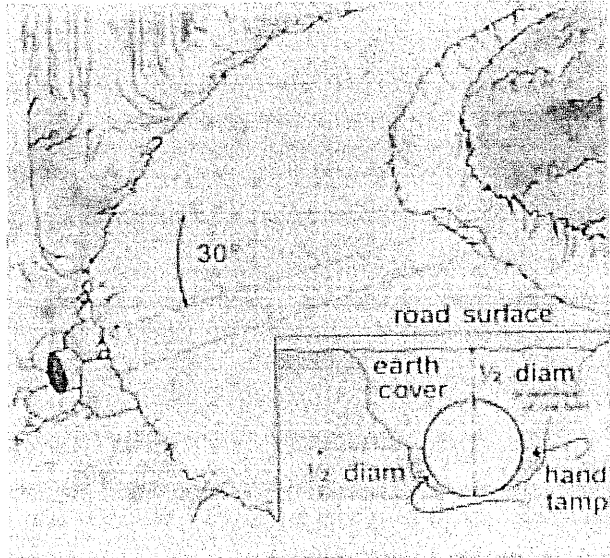


Figure 5: Design and Installation of Pipe Culverts.

permissible, but shall not exceed 300 feet in length.

- Keep skid trail grades as low as topography will allow.
- Walk the area to be logged to locate skid trails.
- Main skid trails should be flagged, cleared and graded. Trails used to bring logs from stump to the main skid trail are usually not graded and require a minimum amount of clearing.
- Lay out skid routes such that proper filter strips along streams can easily be provided and stream crossings will not involve major stream disturbances.
- Avoid stream banks, rocky places and steep grades.
- Building skid trails from the top down is easier.

6. Long straight stretches of skid trail shall be adequately drained using outsloping turnups, broad based dips (on grades of 10 percent or less), or pole culverts. Spacing of drainage structures shall be determined according to Table 1.

- Take advantage of the natural cross drainage.

Dips are fully described on pages 11-21.

-Turn-ups are commonly applied for skid trails rather than roads and the distance of the turn-up is very short compared to a broad based dip.

7. Silt fencing, hay bale erosion checks or water diversions shall be used to prevent sediment from skid trails from entering streams and other surface waters.

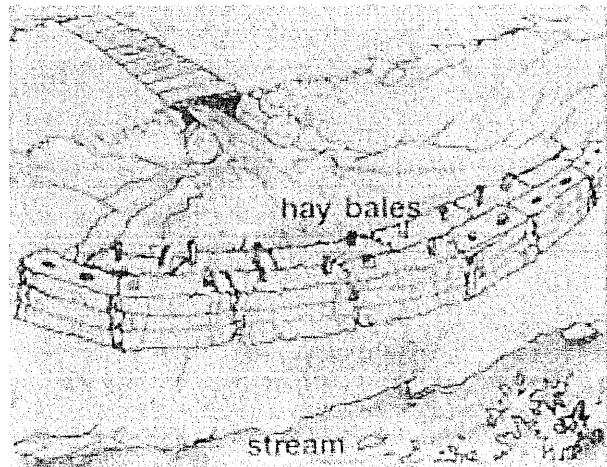


Figure 7: Hay Bale Erosion Check.

9. Truck road crossings of all permanent streams shall be over a bridge or culvert. Streams may be forded by skid trails only where streambeds have stable beds and stable, gradual approaches (gravel or ledge). Streams may also be crossed by brushing-in during frozen winter conditions but all brushed-in material shall be removed from the stream channel when skid trail use has been completed or before spring runoff, whichever occurs first.

-Bridge crossings are preferable to culverts since there is less disturbance of the stream channel.

-Plan roads and skid trails to reduce crossings to the absolute minimum.

-Bridges and culverts prevent erosion and stream siltation and reduce the amount of gasoline, oil and grease which are often washed off the wheels and under-carriage of vehicles when crossing streams.

-Culvert size selection and bridge design should be based on the size (acres) of the drainage area that they serve and should be able to handle the largest potential stream flows. Undersized bridges or culverts may wash out during spring runoff. See

-Fords are acceptable as skid trail crossings when streams have stable beds and approaches (i.e. gravel or ledge).

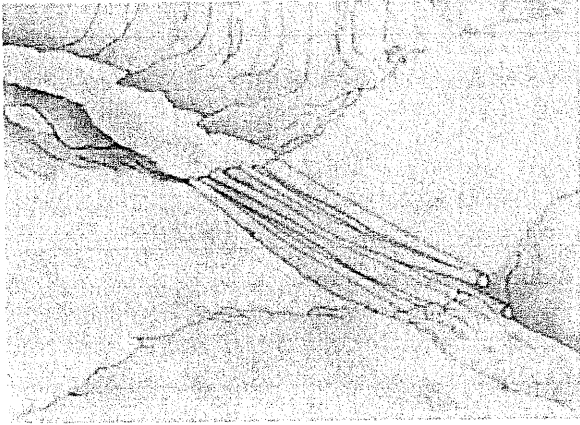


Figure 9: Design of Poled Ford Stream Crossing.

-Temporary crossing of small brooks may be accomplished by placing poles or cull logs side by side in the streambed (Figure 9). The logs must be removed immediately after use.

-Poled fords should be inspected regularly to make sure the stream is not becoming turbid at the crossing.



10. Logging activities, except for the necessary and proper construction of stream crossing structures, shall be kept out of stream channels.

- Streams, both perennial and intermittent, should be left in their natural courses.
- Placement of bridges or culverts that require work in the stream should be done when the water is low.
- Work should be done in as short a period as possible.

11. Turn-ups or broad-based dips shall be used before a truck road or skid trail crosses a stream.

- Turn-ups or broad-based dips should be installed at the bottom of slopes approaching a stream crossing and should be at least 25 feet from the drainage structure to provide for a protective strip between the road or trail and the stream bank.

12. Areas of exposed soil within 25 feet of streams must be seeded and mulched with application rates as shown in Table 3.

- Seeding and mulching should be done as soon as possible to minimize potential for erosion.

## Permanent Cover (cont.)

Material	Rate of Application	Recommended Time of Application
(B) Critical Area Mix —	42 lbs./acre	April 15 – June 15 or Aug. 1 – Sept. 15
<i>Creeping Red Fescue 48%</i>		
<i>Redtop 4%</i>		
<i>Tall Fescue 48%</i>		

### Site Preparation for Permanent Cover

- Lime should be spread at rate of 2 tons/acre.
- Fertilizer should be a mixture of 10-10-10 applied rate of 240 lbs./acre.
- Mulch at 60 bales/acre.

13. Stream crossings shall be made at right angles where possible.

### Protective Strips

14. Except for necessary construction of stream crossings, a protective strip shall be left along streams and other bodies of water in which only light thinning or selection harvesting can occur so that breaks made in the canopy are minimal and a continuous cover is maintained. Log

**Table 4: Protective Strip Width Guide**

Slope of Land Between Roads or Landings and Stream banks or Lake Shores (percent)**	Width of Strip Between Roads or Landings and Stream (Feet Along Surface of Ground)
0-10	50
1-20	70
21-30	90
31-40*	110

\*Add 20 feet for each additional 10 percent side slope.

\*\*See Slope Chart (Figure 1).

**Log Landings**

15. Log landings shall be located on level or gently sloping, stable ground.

-Greater latitude exists in the location of landings during the stable conditions that exist in the frozen winter season.

-Locate log landings away from low or poorly drained areas.

-Landings should be sized to the minimum required for the acres to be cut, the equipment used and the diversity of products produced.

16. Landings shall not be located in protective strips. The width of the protective strip shall be in accordance with Table 4.

## Practices To Be Applied After Logging

It is critical to leave harvested forest land in a condition that minimizes problems in the future. Application of these practices will provide long-term protection of the water.

These protective measures are to be taken before equipment is removed from the logging site.

**Landowners are responsible for maintaining erosion control devices after a logging operation is completed.**

### Truck Roads

18. Water bars (Figure 12) on temporary roads shall be properly installed at intervals shown in Table 1. They shall be at least 8 inches deep and installed with a 4 degree gradient when ledge and rock permit.

-Water bars should be drained at a slight outslope onto undisturbed litter or vegetation. The outslope should allow for natural drainage of water away from the road.

-If the road is to be kept open after logging, the following guidelines should be used in order to preserve effective water bars:

- (a) Keep travel to a minimum,
- (b) Use only in dry weather, and
- (c) Make periodic inspections followed up by basic maintenance.

### Skid Trails

19. Ruts shall be filled and smoothed if they offer any potential for gullyng.

20. Water bars shall be installed at proper intervals according to Table 1.

-Erect barriers (i.e. boulders, felled trees, signs) to prevent off-road vehicles such as trail bikes from damaging waters.

### Surface Water and Stream Crossings

21. All non-permanent structures shall be removed from streams and the channel restored. Permanent culverts left in

## Summary Chart for Drainage Devices

Device	Use	Location/ Spacing	Construction Specifications
Pole Culverts	Logging Roads & Skid Trails	Page 12	Figure 2
Broad-Based Dips	Logging Roads & Skid Trails Less Than 10% Grade	Page 13	Figures 3 and 4
Ditch/ Culverts	Logging Roads	Table I	Table 2 & Figure 5
Turnups	Stream Fords & Skid Trails	Page 20	Figure 6
Header Bridge	Stream Crossings		Figure 8
Fords	Stream Crossings		Figure 9
Water bars	Permanent Logging Roads and Skid Trails	Table I	Figure 12

Barre, VT 05641-4265

802-476-0170

Main FPR Office

Watershed Forester

103 S. Main St. 10 South, Waterbury

802-241-3672

**FOR MORE INFORMATION**

To learn more about Vermont's Watershed Forestry  
Program, check our Web Site at:  
<http://www.vtfr.org/watershed/index.cfm>

Hausman, R. F. and Pruett, E. W., *Permanent Logging Roads for Better Woodlot Management*, 1973, USDA Forest Service, State and Private Forestry, Upper Darby, Pennsylvania.

Kochenderfer, J. N., *Erosion Control on Logging Roads in the Appalachians*, Research Paper NE-158, 1970, USDA Northeastern Forest Experiment Station, Upper Darby, Pennsylvania.

McEvoy, Thom et. al., *Proceedings-Forest Water Quality and Erosion Control in Vermont*, 1986, School of Natural Resources, UVM, Burlington, Vermont.

Winkelaar, P., *Forest Road Location and Erosion Control on Northern New Hampshire Soils*, Extension Publication No. 2, 1971, Cooperative Extension Service, University of New Hampshire, Durham, New Hampshire.



The provisions of subsections (c), (d) and (e) of this section shall not regulate accepted agricultural or silvicultural practices, as such are defined by the Commissioners of Agriculture and Forests, Parks and Recreation, respectively, after an opportunity for a public hearing... (From 10 V.S.A. Sec. 1259(f))

#### **Enforcement:**

(a) If the Secretary of the Agency of Natural Resources finds that any person has discharged or is discharging any waste (by not having used acceptable management practices) or that any person has failed to comply with any provisions of any order or permit issued in accordance with this chapter, the Secretary may bring suit in the Superior Court in any county where the discharge or noncompliance has occurred to enjoin the discharge and to obtain compliance. The suit shall be brought by the Attorney General in the name of the state. The court may issue a temporary injunction or order in any such proceedings and may exercise all the plenary powers available to it in addition to the power to:

- (1) enjoin future discharges;
- (2) order the design, construction, installation or operation of pollution abatement facilities or alternate waste disposal systems;
- (3) order the removal of all wastes

\$25,000 or be imprisoned not more than six months or both. Each violation may be a separate offense and, in the case of a continuing violation, each day's continuance may be deemed a separate offense.

(b) Any person who knowingly makes any false statement, representation or certification in an application, record, report, plan or other document filed or required to be maintained under this subchapter, or by any permit, rule, regulation or order issued under this subchapter, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this subchapter or by any permit, rule, regulation or order issued under this subchapter, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than six months or both.

**(From 10 V.S.A. Sec. 1275)**

#### **Alteration of Streams:**

A person shall not change, alter or modify the course, current or cross-section of any stream with a drainage area greater than ten (10) square miles either by movement, fill or by excavation of ten (10) cubic yards of fill. A person proposing to alter or modify a stream shall apply in writing to the Natural Resources Agency for a permit to do so. Penalty: Maximum fine, \$1,000. Each violation may be a

## **Slash Removal:**

(a) A person may cut or cause or permit to be cut forest growth only if all slash adjoining the right-of-way of any public highway or the boundary lines of woodlots owned by adjoining property owners is treated in a manner satisfactory to the town forest fire wardens.

(b) Owners or operators of timber or woodlots shall leave the main logging roads through cutover areas free from slash so that tractors may pass over these roads unobstructed in order to carry men and supplies and fire fighting equipment to fire suppression crews.

(c) If in the opinion of the town forest fire warden there is no fire hazard as a result of a cutting, he may issue, upon request, a statement relieving the operator of the conditions in this section. Penalty: Upon complaint of a fire warden, a person who violates the provisions of this section shall be fined not more than \$50 for each offense.

**(From 10 V.S.A. Sec. 2648)**

## **Logging Operations Above 2500 Feet in Elevation:**

Any logging activity over 2500 feet in elevation requires an Act 250 permit.

**(From 10 V.S.A. Sec. 6001, (Sec. 3), 6081)**

- qualifying forest land must be at least 25 acres in size and actively managed for repeated forest crops.
- stabilization agreements must provide for rollback tax, amounting to the previous three years "tax savings". This would be due if the land were converted to another use in violation of the contract.
- aggrieved landowners may appeal the decisions of local officials regarding applications, use value appraisal and land classification.

Tax stabilization contracts granted under this statute are subject to the general provisions of 24 V.S.A. Sec. 2741 discussed above. The difference (here) is absence of town meeting approval and the addition of certain state requirements: 25 acre parcels, rollback tax, etc.

**(From 32 V.S.A. Sec. 3846)**

### **State Land Use Tax:**

(a) Qualifying owners may obtain use value (rather than fair market value) appraisal on their forest land by applying to local officials. To qualify, such land must be:

- at least 25 acres in size and actively managed for repeated forest crops.
- subject to a 10-year forest management plan

Applications and information are available at the Vermont Department of Forests, Parks, and Recreation District Offices.

(From 10 V.S.A. Sec. 2625)

## Langlais, Matt


---

**From:** Chris Fife [Chris.Fife@plumcreek.com]  
**Sent:** Friday, October 16, 2009 10:14 PM  
**To:** Langlais, Matt; Dan Kilborn  
**Subject:** Stand polygons  
**Attachments:** LM winter 10-16.shx; LM winter 10-16.prj; LM winter 10-16.sbn; LM winter 10-16.sbx; LM winter 10-16.shp; LM winter 10-16.dbf

I'm attaching the stand polygons for the areas we will be looking at in Lemington.

Chris Fife

Senior Resource Forester  
Plum Creek - Northern Kingdom Unit  
603-237-8657 phone/fax  
802-473-0866 mobile

Build responsibly. Choose wood from well-managed  SFI® forests.

19

7999  
2109

## HARVEST PRESCRIPTION FACT SHEET

PROJECT CODE: 7086

CONTRACT NUMBER: LM-03-01-09

FORESTER: JCH

TOWN: Lemington

PHOTO: 220264, 220260

STANDS: 24, 34, 43, 46, 54

ROADS: Simms Hill, Upper Clough Brook

JOB DESIGNATION: Upper Clough Brook North

TOTAL ACRES IN STANDS: +/- 471

TOTAL ACRES IN STANDS TO BE TREATED: +/- 471

PROPOSED CONTRACTOR: (TBA)

**HARVESTING EQUIPMENT RESTRICTIONS OR REQUIREMENTS:** The harvest can be accomplished by a mechanized crew with feller-buncher and grapple skidders or cut-to-length equipment.

**CURRENT STAND CONDITION:** *- include moose browse here - for Dam*

Stand 24 is a well stocked Softwood dominated mixed wood type with a total basal area of 110 ft<sup>2</sup>, of that 50 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Balsam fir, Red spruce, White birch, Red maple and Yellow birch. The mean stand diameter is 7.9 inches. The stand is weighted towards the medium saw timber size class. The White birch is in severe decline and the majority of Balsam fir is mature. The understory is well stocked with Red spruce seedling and saplings.

Stand 34 is a well stocked Northern hardwood type with a total basal area of 82 ft<sup>2</sup>, of that 35 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Balsam fir, Red Spruce. The mean stand diameter is 8.4 inches. The stand is weighted towards the medium saw timber size class. The current stand has a high level of residual stand damage and a fair amount of crown die-back. The understory varies greatly in stocking of acceptable regeneration, with small pockets of Sugar maple seedling and saplings in a patchy distribution around the stand.

Stand 43 is a well stocked Hardwood dominated mixed wood type with a total basal area of 88 ft<sup>2</sup>, of that 38 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Yellow birch, Balsam fir, White birch, Red spruce, Red maple. The mean stand diameter is 8.2 inches. The stand is weighted towards the medium saw timber size class. The White birch in the stand is in severe decline and the majority of Balsam fir is mature. The majority of the stand has good stocking in Red spruce seedlings and saplings in the understory.

Stand 44 is a well stocked Northern hardwood type with a basal area of 97 ft<sup>2</sup>, of that 42 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Balsam fir, Red spruce. The mean stand diameter is 7.6 inches. The stand is weighted towards the small saw timber size class. The stand has a fair amount acceptable stocking in the of small saw timber size class.

Stand 46 is a poorly stocked Northern Hardwood type with a basal area of 40 ft<sup>2</sup>, of that 8 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech. The mean stand diameter is 6.8 inches. The stand is weighted towards the large pole timber size class. The stand is well stocked with Sugar maple and Yellow birch seedlings and saplings mixed in with beech and striped maple.

Stand 54 is a moderately stocked Northern hardwood stand with a basal area of 72 ft<sup>2</sup>, of that 28 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Red spruce, Balsam fir. The mean stand diameter is 7.6 inches. The stand is weighted towards the medium saw timber size class. The understory is dominated by beech and striped maple.

20 -

**REGENERATION:**

Stand	Seedlings per Acre	1"-3" Stems per Acre	Total Stems per Acre	Dominate Acceptable Species
LM-03-24	364	217	581	Red spruce
LM-03-34	198	92	290	Sugar maple
LM-03-43	290	120	410	Red spruce
LM-03-44	128	66	194	Sugar maple
LM-03-46	310	88	398	Sugar maple, Yellow birch
LM-03-54	120	33	153	Sugar maple, Yellow birch

**ELEVATION & TERRAIN:** Elevation ranges from 1700-2500 ft. with poorly drained soils. The ground is gradual in slope, but increases on the far western side of the harvest unit.

**SURROUNDING LANDSCAPE:** The unit is located at the end of Simms Hill Road and abuts the Lemington Town forest. The proposed activities are consistent with accepted forest management activities in the region and pose no adverse affect to adjacent biological communities. The harvest unit is not visible to the public.

**DESIRED GOAL OF HARVEST:**

- Capture value in declining timber
- Retain good quality trees as seed source and retained value for the long term
- Improve stand quality and provide openings for natural regeneration to occur where it is deficient
- Protect and release desirable advanced regeneration
- Protect riparian zones and wetland habitat

**RECOMMENDED TREATMENT PRESCRIPTION:**

Stand 24 will receive an Improvement Thinning (ITH) (even age UVA code 2). The harvest will target the at-risk and mature stems. The target residual basal area is 60 ft<sup>2</sup>. The harvest will release quality growing stock and provide gaps to promote regeneration.

Stand 34 will receive a Two Stage Shelterwood (2SS) (even age UVA code 3). The stand lacks an acceptable amount of regeneration and the majority of the overstory is unacceptable growing stock. A low density shelterwood with a residual basal area of 30-40 ft<sup>2</sup> will be utilized to discourage the establishment of beech in the understory. The shelterwood will be irregular in distribution and will target Sugar maple and Yellow birch with large crowns to provide shade and seed distribution. *- mention areas that will receive patch cut.*

Stand 43 will receive an Improvement Thinning (ITH) (even age UVA code 2) and Overstory Removal (OSR) (even age UVA code 4). 25 -30% of the stand will receive an Overstory Removal where the overstory is in severe decline and the understory is well stocked with seedling and sapling sized Red spruce. The remaining portion of the stand will receive an Improvement Thinning. The harvest will target the at-risk and mature stems. The target residual basal area is 60 ft<sup>2</sup>. The harvest will release quality growing stock and provide gaps to promote regeneration.

Stand 44 will receive an Improvement Thinning (ITH) (even age UVA code 2). The stand is well stocked with small saw timber, however many of the medium and large saw timber stems are in decline. The thinning will target the at-risk and mature stems and leave a target residual basal area of 60 ft<sup>2</sup>. This release the small saw timber size class and open up gaps for regeneration.

Stand 46 will receive and Overstory Removal (OSR) (even age UVA code 4). The overstory is in decline and the current stand conditions warrant removal. The understory has good stocking in Sugar maple and Yellow birch seedlings and saplings mixed within Beech and Non-commercial species. Care will be taken during layout to reduce the disturbance of the advanced regeneration. In small areas that do not have sufficient levels of acceptable regeneration a seed tree will be left to ensure regeneration. Yellow birch, Red Spruce or clumps of Sugar maple will be targeted as seed trees.



Stand 54 will receive a Seed Tree cut (STC) (even age UVA code 13). The stand has many pockets of acceptable regeneration established in openings from a previous entry, however small pockets of mature and at risk stems remain and do not have sufficient levels of regeneration to warrant an Overstory Removal. The pockets of remaining overstory will be removed and individual Yellow birch or clumps of Red spruce or Sugar maple will be left to provide seed.

~~mentioned in the plan~~  
Pre-harvest layout will include:

- Identify and protect streams and significant wetlands using blue flagging for the centerline of non-eased stream buffers and the side of the stream for eased buffers and wetlands.
- Identify any potential problems and address them with the contractor.
- Identify former skid trails that can be used in current operations and flag new trails where needed using orange flagging.
- Flag stream crossings will have two pink flags and will designate stream crossing method with written instructions on flagging at crossing location and shown on LV's stream crossing worksheet.
- Require Feller-Buncher to lay all felled wood in skid trails to limit damage to the advanced regeneration and residual stand.
- Minimize skid trails to limit site disturbance.
- Establish bounds of harvest in flagged in pink or pink with "Timber Harvest Boundary" printed in black letters. Where the unit adjoins the property line the unit will be marked in blue flagging.

#### DESIGNATION OF TIMBER FOR HARVEST:

All stands within this unit (30) will be marked in blue or orange paint and three slashes with a C to indicate that all trees within the paint are to be cut. Marked timber will utilize blue or orange paint. Slashes or spots on at least two sides of the tree and a stump spot indicate removal. Skid trails will be designated with orange flagging. Trees marked with a "W", "X", "C", or "SB" should not be harvested since their designations refer to wildlife trees (w), no cut trees (x), no cut-line trees (c), and stream buffer (SB).

#### STREAM / LEGACY BUFFER PRESCRIPTION:

Larger order "blue line" streams and will have a 50' buffer where no operation will take place and crossings will be very limited. The 50' buffer will also apply to wetlands and other riparian features when appropriate. Blue flagging will be used to identify the buffer on the large order eased streams, and lower order non-eased streams will have blue flagging to designate the estimated stream centerline.

**TRUCK ROAD CONDITIONS:** No road upgrades are needed

#### SKID TRAILS:

Trails will be established by LV staff and designated in orange flagging. Any unacceptable trails will be identified as unsuitable and new trails will be put in place where needed.

#### LANDINGS:

Existing landings will be utilized for the harvest.

#### REGULATORY CONSIDERATIONS:

N/A

#### PERMIT REQUIREMENTS:

Heavy Cut (Act 15) notification required.

#### HABITAT RETENTION DESIGNATION

Retention will be utilized to retain native tree and vegetation species for the reoccupation of an implemented clear-cut or overstory removal. For information on implementation techniques see pages 51-53 of the Forest Management Plan, Nov. 2007.

#### THREATENED & ENDANGERED SPECIES CONSIDERATIONS:

N/A

**SIGNAGE / NOTIFICATION REQUIREMENTS:**

Intent to cut notification to FP&R and VLT due to the CE & UVA

**CONSERVATION EASMENT CONDITIONS:**

As addressed in page 2 of the Champion Working Forest Conservation Easement it is required that two 16" or greater logs per acre of standing dead or downed trees be established or retained. This includes the recruitment of course woody debris by selecting trees that have the possibility of fulfilling the requirement in the future. For more detail see page 54 of the Forest Management Plan, Now 2007.

**CLOSE OUT REQUIREMENTS:**

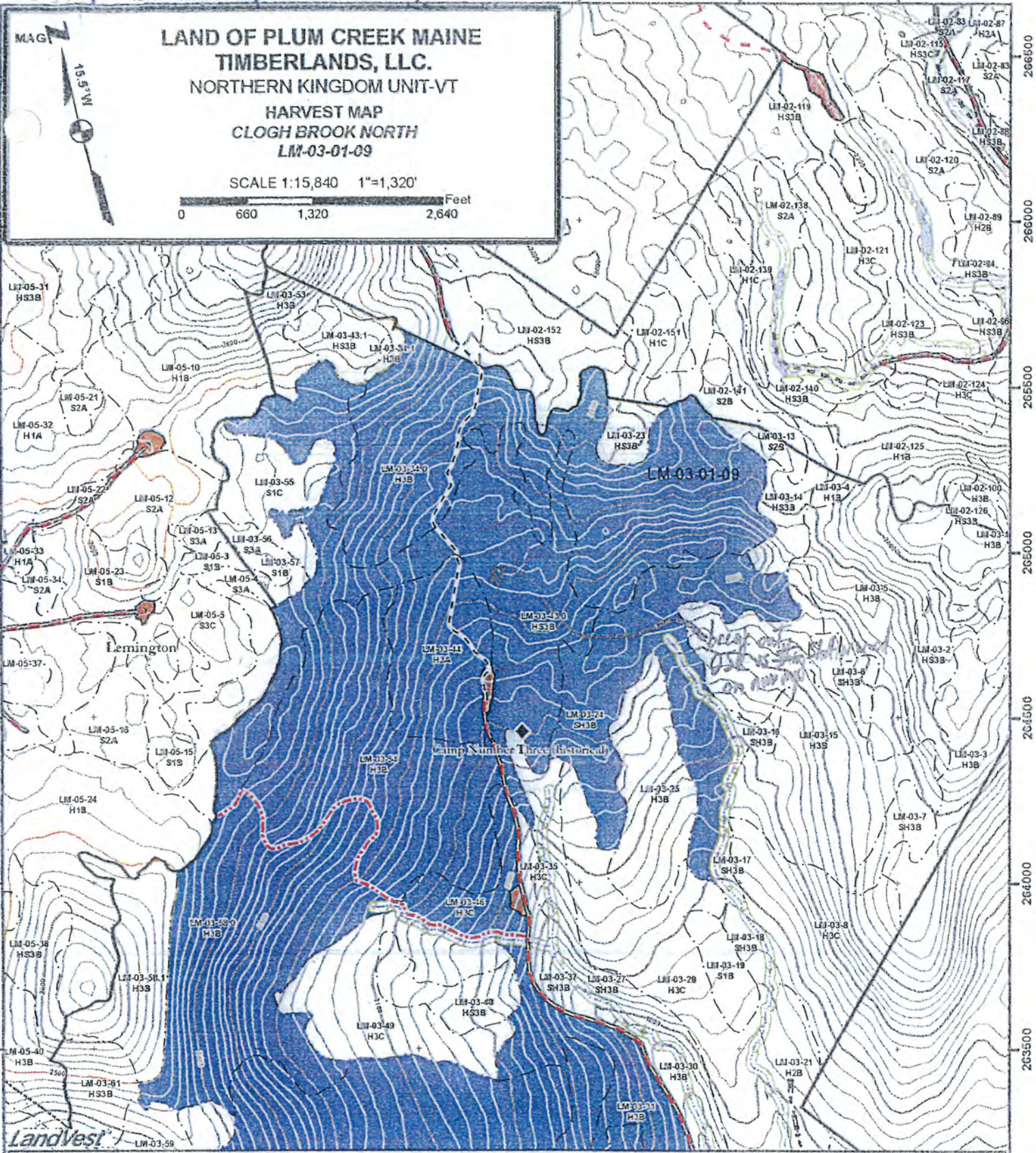
Refer to contract for specs.

665000 VI STATE PLANE NAD 83 METERS 665000 665000 670000 670500



**LAND OF PLUM CREEK MAINE  
TIMBERLANDS, LLC.  
NORTHERN KINGDOM UNIT-VT  
HARVEST MAP  
CLOUGH BROOK NORTH  
LM-03-01-09**

SCALE 1:15,840 1"=1,320'  
0 660 1,320 2,640 Feet



Town: LEMINGTON  
County: ESSEX  
Compartment: LM-03  
Forester: JCH  
Job Number: LM-03-01-09  
Actor: TBD

STAND NUMB	STRATA	OS TYPE	SILV PRES	ACRES
LM-03-24	SH34B/SH2B	SH3B	ITH	68.8
LM-03-34.0	H3B	H3B	2SS	137.0
LM-03-43.0	HS3B	HS3B	OSR/ITH	115.1
LM-03-44	H3B	H3A	ITH	37.0
LM-03-46	H3C/H1B	H3C	OSR	15.9
LM-03-54	H3B	H3B	STC	97.4
<b>TOTAL (Acres derived from GIS)</b>				<b>471.1</b>

- PROPOSED HARVEST
- ACTIVE HARVEST
- COMPLETE HARVEST
- APPROVED HARVEST
- POSTPONED HARVEST
- FLOWAGE BOG
- GRAVEL PIT
- LANDING
- AGRICULTURAL
- RIPARIAN ZONE
- SPECIAL TREATMENT AREA
- WATER
- COUNTY LINE
- TOWN LINE
- STREAM
- STAND LINE
- COMPARTMENT LINE
- 20 FT CONTOUR
- 100 FT CONTOUR
- 2500 FT CONTOUR
- POWERED PUBLIC ROAD
- GRAVEL PUBLIC ROAD
- YEAR ROUND GRAVEL
- SUMMER ROAD (UNLIMITED GRAVEL)
- IMPROVED WINTER ROAD
- UNIMPROVED WINTER ROAD
- SHD TRAIL (MAINTAINED ROADWAY)
- UNKNOWN ROAD SURFACE
- CUTLINE EDGE
- GATE
- CAMP

Map Document: (D:\map\_projects\VT\clients\PLUM\_CREEK\_7086\HARVEST\_UNITS\LM-03-01-09\_CLOUGH\_BROOK\_NORTH.mxd)  
10/21/09 - 11:27:20 AM

668000 668500 669000 669500 670000 670500

**Langlais, Matt**

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**From:** Chris Fife [Chris.Fife@plumcreek.com]  
Thursday, November 05, 2009 4:31 PM  
Langlais, Matt; Dan Kilborn; Greenwood, Richard  
**Cc:** Jon Horton  
**Subject:** Updated Maps  
**Attachments:** LM-03-02-09\_CLOUGH\_BROOK\_SOUTH\_NOPHOTOedit.pdf; LM-01-02-09  
\_WILLARD\_STREAM\_NOPHOTOedit.pdf; LM-03-01-09  
\_CLOUGH\_BROOK\_NORTH\_NOPHOTOedit.pdf

Attached are the updated maps for the harvest blocks we reviewed last week. Areas within the same stand that will receive different silvicultural treatments are delineated.

Matt, you should receive the amended forms in the mail by tomorrow. Dan, I'll email you the updated plans if that's ok.


Let me know if you need anything else for these blocks.

Thanks,

Chris Fife

Senior Resource Forester  
Plum Creek - Northern Kingdom Unit  
603-237-8657 phone/fax  
802-473-0866 mobile

21

Build responsibly. Choose wood from well-managed  SFI® forests.

568000 568500 569000 569500 570000




Use Value Appraisal Conformance Inspection Report  
Findings of Contrary Cutting  
Plum Creek Maine Timberlands, LLC  
Lemington, VT  
April 2010



PC EXHIBIT 51  
Docket No.  
72-12-10 Excv, et al  
6/3/13  
adm

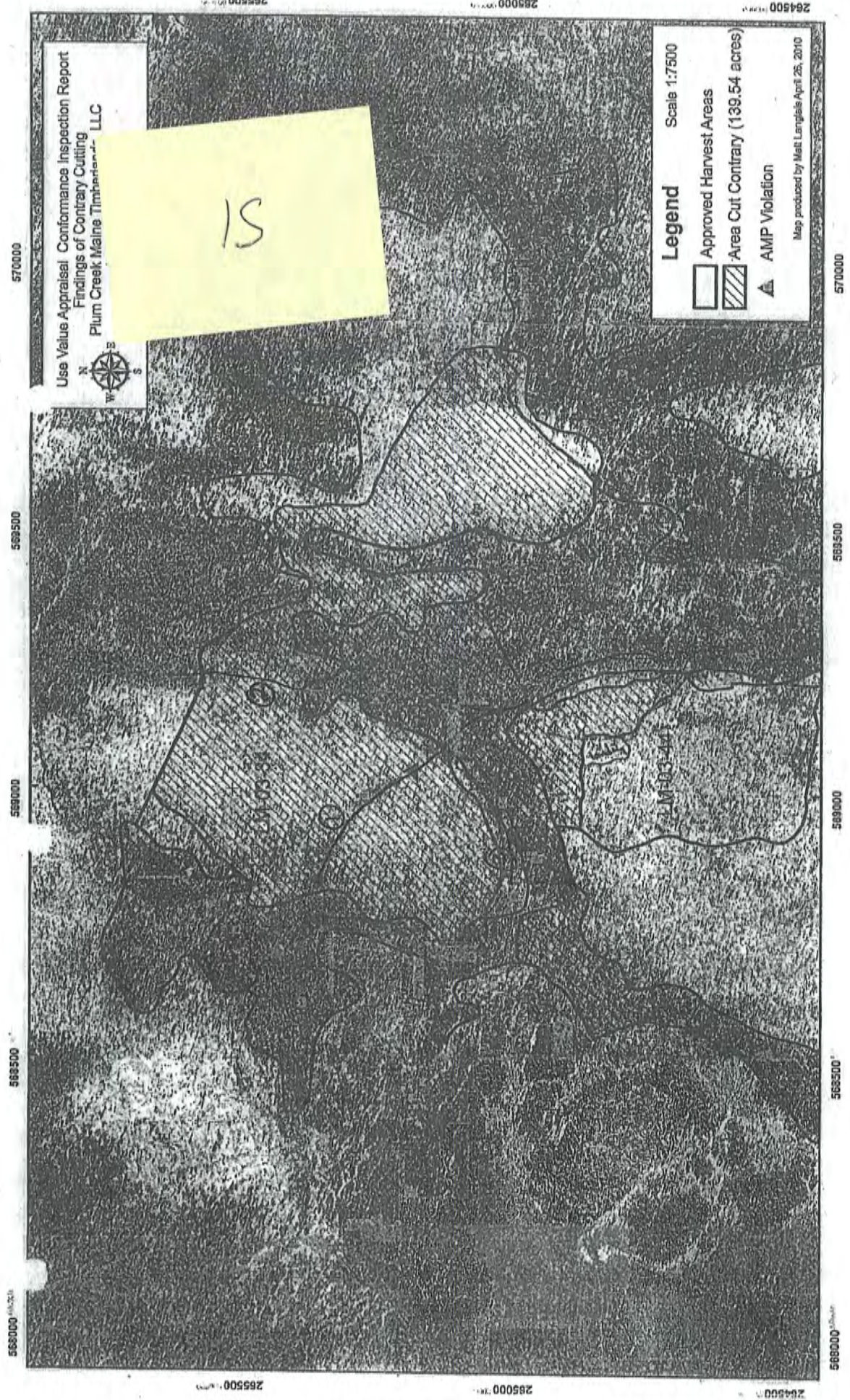


**Legend** Scale 1:7500

-  Approved Harvest Areas
-  Area Cut Contrary (139.54 acres)
-  AMP Violation

Map produced by Matt Langlais April 26, 2010

265000 265500 266000 266500 267000



Use Value Appraisal Conformance Inspection Report  
Findings of Contrary Cutting  
Plum Creek Maine Timberland, LLC



IS

Legend Scale 1:7500  
Approved Harvest Areas  
Area Cut Contrary (139.54 acres)  
AMP Violation  
Map produced by Matt Langlais April 26, 2010

568000

568500

569000

569500

570000

265500

265000

264500

568000

568500

569000

569500

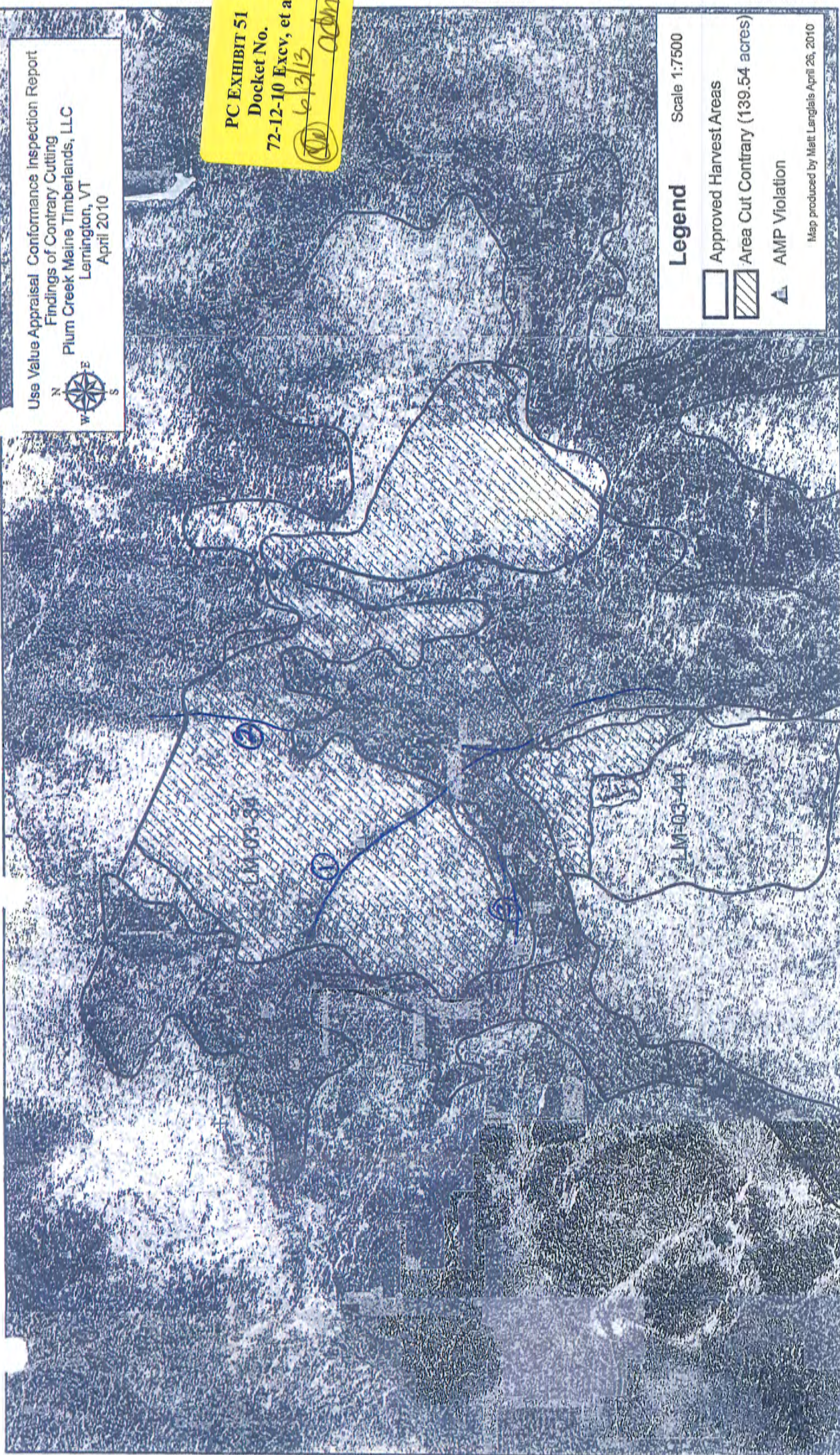
570000

568000 569000 569500 570000

Use Value Appraisal Conformance Inspection Report  
Findings of Contrary Cutting  
Plum Creek Maine Timberlands, LLC  
Lerrington, VT  
April 2010



PC EXHIBIT 51  
Docket No.  
72-12-10 Excy, et al  
6/9/13  
adm



**Legend** Scale 1:7500  
Approved Harvest Areas  
Area Cut Contrary (139.54 acres)  
AMP Violation

Map produced by Melt Langlais April 26, 2010

264500 265000 265500

SI





## Inventory of Plum Creek Timberlands

### Attachment B: Inventory Cruise Specifications

#### General Procedures

- 1) Plum Creek Timber Company (PCTC) will provide the contractor with a shapefile of the plot locations to be cruised. Contractor is to flag the cruise line starting location at a readily identifiable landscape feature with the distance and bearing to the first point center written on the flagging.
- 2) Contractor will hang flagging where cruise lines cross major features (skid roads, pickup truck roads, property line, stream, etc.) and mark it with the direction and distance to the nearest point.
- 3) Clearly mark point centers on the ground with a **surveyor's type flag (stick, or similar)**, and also mark with flagging tied at eye level to make it clearly visible from a distance. Mark the flagging with the unique point identifier, the cruiser's initials and date.
  - a) Two types of plots will be taken for this cruise Prism plots and fixed area plots.
    - i) Prism plots:
      - (1) Use a 5 BAF prism.
      - (2) Plot spacing by grid with a plot every 2 acres – see shapefile
    - ii) Fixed area plots:
      - (1) 1/1000 acre fixed plots
      - (2) Plot Spacing by grid with three plots per acre.
- 4) Send or deliver all completed point data from the previous work week (cruise batches), in digital format (the form) as defined by PCTC.
- 5) All batches will be audited to the description on Exhibit E. Plum Creek will provide feedback on the results of the audit within two weeks of receiving a batch from the contractor. All batches that have passed auditing will be processed for invoice payment. All failed batches will be subject to re-cruise. In these cases payment will be withheld until such batch passes.
- 6) Completion of all plots. Send all completed point data in the digital format (the form) as defined by PCTC and all field tallies, notes, maps, and data that are property of PCTC.

#### Specific--Individual Tree Specifications,

##### All Prism Plots

- 1) A prism shall be employed to select all trees on a point.
- 2) Tree Measurements
  - a) Begin tree measurements at each point with the first tree (mark as #1 or flagged at dbh) to the east of north and proceed in a clockwise direction.
  - b) Tally all species 1.0 -inch dbh class and larger
  - c) The 1-inch dbh classes will be defined as shown in the following example. The 6-inch dbh classes will range from 5.60 to 6.59 inches.
  - d) Record trees forked below 4 1/2 feet as two separate trees.
  - e) Mark all trees with a paint stick at the point dbh was measured.
  - f) Measure all borderline trees for limiting distance and mark those determined as "out" with an X at dbh facing plot center
- 3) For each live tree on each point, record species, dbh, acceptable or unacceptable growing stock and total height on every tree; to the top of the live crown.

##### All fixed area plots:

- 1) A fixed radius plot encompassing 1/1000th of an acre from a fixed plot center

- a) Begin with a flag at plot center This is critical for check cruising the plot
- 2) Tree measurements:
  - a) Begin tree measurements at each point with the first tree (flagged) to the east of north and proceed in a clockwise direction.
  - b) Tally all species 6 inches in height and larger
  - c) For each live tree on each plot, record species, acceptable/unacceptable growing stock. For unacceptable growing stock indicate whether due to browse (UGS-B) or suppressed (UGS-S). For each species/AGS-UGSB-UGSS code combination, record up to 10 stems. Record species/AGS-UGSB-UGSS combinations that have more than 10 stems as 10+

**Other plot data:**

- 1) Is there a seed source available? (birch 300', maple 150', red spruce 400', balsam fir 200') Yes/No.

**Specific--Quality Control Standards**

Plum Creek Timber Company will audit points. Audit criteria are attached as (Exhibit E and F).

**Electronic Data Format**

- 1 Collected plot data will be submitted to Plum Creek using the format attached (The Form – Exhibit D) or as agreed upon by both parties.

Summary                      Lemmington acres                      108.9

Regenerati                      plots    plots  
    331    BAF 5    60

Acceptable Growing Stock

Total BA	21 422
QMD	5.07
Avg BA per tree	0.14

Species	Stems/ac	Total stems
RS	84.59215	9212 084592
WB	78.54985	8554.07855
YB	1604.23	174700.6042
BF	268.8822	29281.26888
HM	996 9789	108570.997
RM	758.3082	82579.75831
BE	280 9668	30597.28097
QA	15.10574	1645.015106
R	33 23263	3619.033233
HM	12 08459	1316.012085
YB	30.21148	3290.030211
BE	9.063444	987 0090634
	<b>4172.205</b>	<b>454353.1722</b>

Unacceptable Growing Stock

Species	Stems/ac	Total stems
RM	78.54985	8554.07855
MM	1930.514	210232 9305
BF	163.142	17766.16314
RM	45.31722	4935.045317
BF	72.50755	7896.072508
PC	1190.332	129627 1903
YB	658.6103	71722.65861
BF	151 0574	16450.15106
YB	84 59215	9212.084592
HM	123.8671	13489.12387
HM	57 40181	6251.057402
RM	480 3625	52311.48036
BE	33 23263	3619.033233
HM	413.8973	45073.4139
NC	3.021148	329 0030211
MM	3.021148	329.0030211
RS	6.042296	658.0060423
WB	33 23263	3619 033233
BE	30.21148	3290.030211
BE	105.7402	11515 10574
YB	151 0574	16450.15106
QA	12 08459	1316.012085
R	9.063444	987 0090634
	<b>5836.858</b>	<b>635633.8369</b>

LEMINGTON CRUISE RESULTS

Tract Name Lemmington  
Acres 108.9

1/1000th acre Regeneration Plots 311

\* when a specific species tallied more than 10 in any one 1/1000th acre plot the tally was capped at ten. The stems per acre for both acceptable and unacceptable growing stock are actually higher

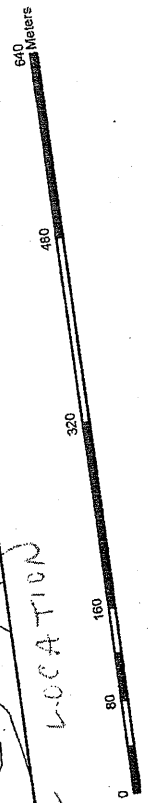
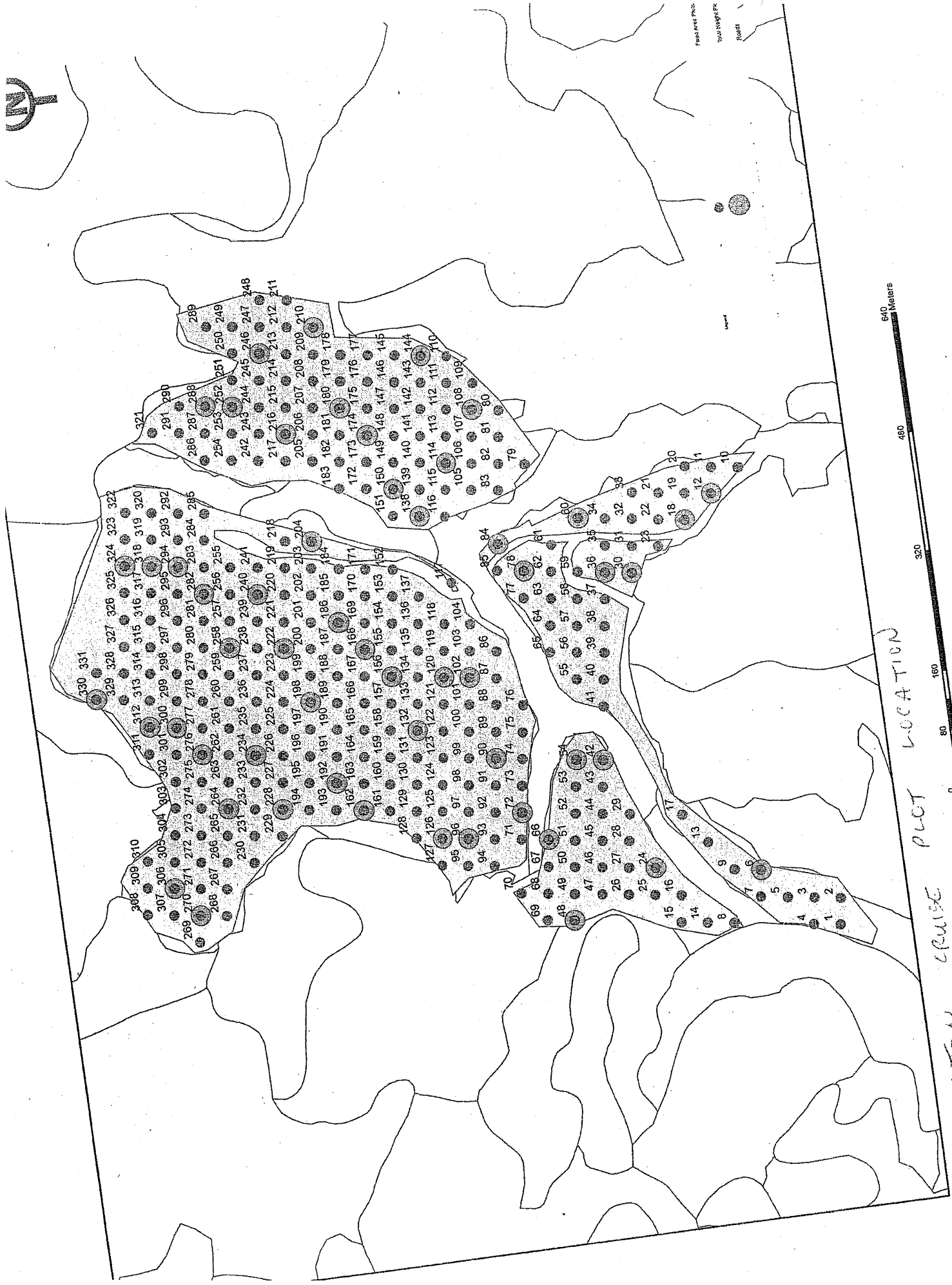
	Stems/ac*	Total Stems*
Acceptable Growing Stock	4172	454353
Unacceptable Growing Stock	5837	635634

BAF 5 Prism Plots 60

Total Basal Area	21.422
Quadratic Mean Diameter	5.07
Avg Basal Area per tree	0.14



Point Plot  
Tree Height  
Roads



LEWINGTON CRUISE PLOT LOCATION

LEWINGTON

LEMINGTON CRUISE AREA

LM-03-01-09 Clough Brook North,  
Proposed Cruise Area. 118.6 acres

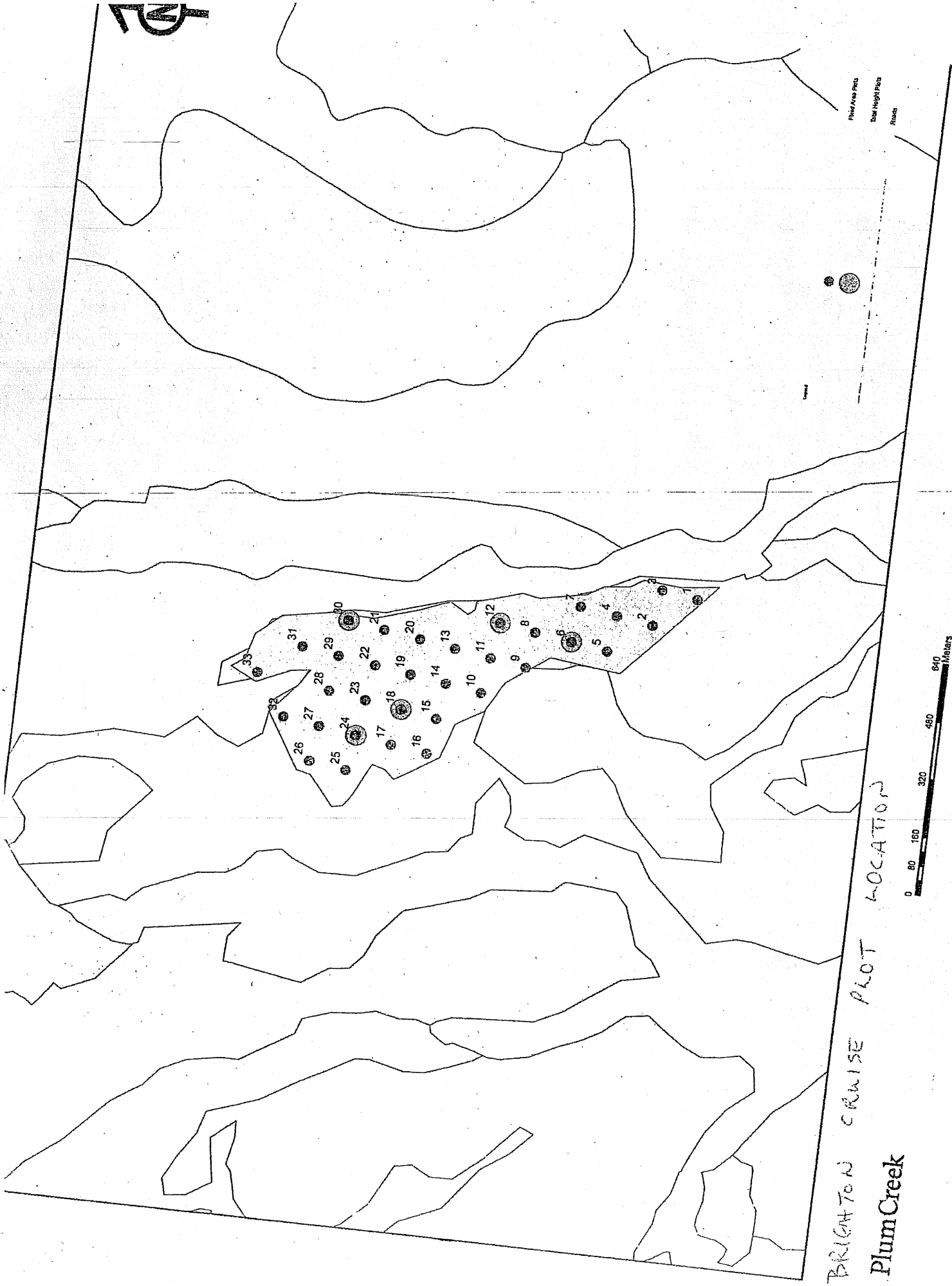


01-09 Clay Hill Brook East, AREA  
Proposed Cruise Area. 14.8 acres



74

Fixed Area Plot  
5m High Plot  
Road



BRIGHTON CRUISE PLOT LOCATION  
PlumCreek



# BRIGHTON CARLISE RESULTS

Tract Name Brighton  
Acres 10.8

1/1000th acre Regeneration Plots 33

	Stems/lac*	Total Stems*
Acceptable Growing Stock	9000	97200
Unacceptable Growing Stock	8303	89673

\* when a specific species tallied more than 10 in any one 1/1000th acre plot the tally was capped at ten. The stems per acre for both acceptable and unacceptable growing stock are actually higher.

BAF 5 Prism Plots 5

Total Basal Area	45.01
Quadratic Mean Diameter	3.51
Avg Basal Area per tree	0.07

Summery Brighton ac 10.8

Regenerati plots 33 BAF 5 plots 5

Acceptable Growing Stock

Total BA	45.010
QMD	3.51
Avg BA per	0.07

Species	Stems/ac	Total stems
RM	2848.5	30763.64
YB	3848.5	41563.64
HM	121.2	1309.091
BE	2121.2	22909.09
BF	30.3	327.2727
QA	30.3	327.2727
	<b>9000</b>	<b>97200</b>

Unacceptable Growing Stock

Species	Stems/ac	Total stems
PC	4454.5	48109.1
YB	90.9	981.8
BE	757.6	8181.8
MM	1090.9	11781.8
YB	697.0	7527.3
RM	575.8	6218.2
HM	30.3	327.3
YB	30.3	327.3
RM	181.8	1963.6
HM	181.8	1963.6
BE	181.8	1963.6
BE	30.3	327.3
	<b>8303.03</b>	<b>89672.73</b>

# AVERILL CRUISE RESULTS

Tract Name Averill  
Acres 14.88

1/1000th acre Regeneration Plots 40

	Stems/lac*	Total Stems*
Acceptable Growing Stock	8050	119784
Unacceptable Growing Stock	7725	114948

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BAF 5 Prism Plots 6

Total Basal Area	20.004
Quadratic Mean Diameter	4.74
Avg Basal Area per tree	0.12

Summery                      Averill acres              14.88

Averill acres              14.88

Regeneration              plots                      40                      BAF 5                      plots                      6

Acceptable Growing Stock

Total BA	20.004
QMD	4.74
Avg BA per tree	0.12

Species	Stems/ac	Total stems
RM	4125	61380
YB	2550	37944
BF	25	372
RS	50	744
WB	1250	18600
QA	25	372
BE	25	372
	<b>8050</b>	<b>119784</b>

Unacceptable Growing Stock

Species	Stems/ac	Total stems
RM	900	13392
PC	5750	85560
YB	300	4464
WB	200	2976
YB	125	1860
BF	75	1116
MM	300	4464
YB	25	372
RS	25	372
HM	25	372
	<b>7725</b>	<b>114948</b>



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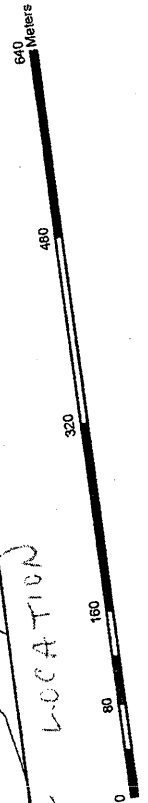
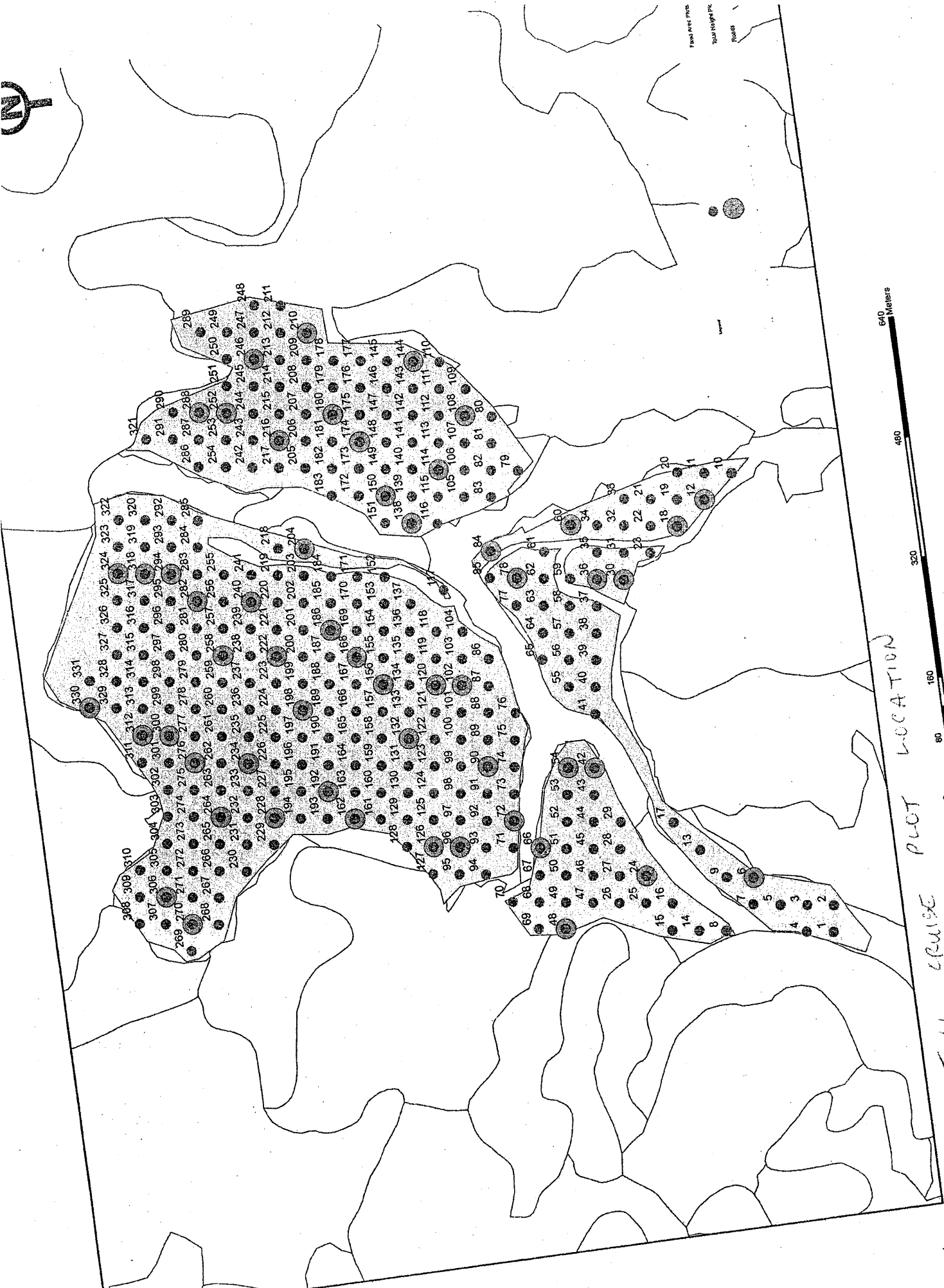
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LEMINGTON CRUISE AREA

LM-03-01-09 Clough Brook North,  
Proposed Cruise Area. 118.6 acres





PILOT LOCATION

LEWINGTON CRUISE



LEMMINGTON CRUISE RESULTS

Tract Name Lemmington  
Acres 108.9

1/1000th acre Regeneration Plots 311

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Quadratic Mean Diameter	5.07
Avg Basal Area per tree	0.14

Summary Lemmington acres 108.9

Regenerati plots 331 BAF 5 plots 60

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YB	84.59215	9212.084592
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YB	151.0574	16450.15106
QA	12.08459	1316.012085
R	9.063444	987.0090634
	<b>5836.858</b>	<b>635633.8369</b>

22

Amended 10/27/09

## HARVEST PRESCRIPTION FACT SHEET

PROJECT CODE: 7086

CONTRACT NUMBER: LM-03-01-09

FORESTER: JCH

TOWN: Lemington

PHOTO: 220264, 220260

STANDS: 24, 34, 43, 46, 54

ROADS: Sims Hill, Upper Clough Brook

JOB DESIGNATION: Upper Clough Brook North

TOTAL ACRES IN STANDS: +/- 471

TOTAL ACRES IN STANDS TO BE TREATED: +/- 471

PROPOSED CONTRACTOR: (TBA)

**HARVESTING EQUIPMENT RESTRICTIONS OR REQUIREMENTS:** The harvest can be accomplished by a mechanized crew with feller-buncher and grapple skidders or cut-to-length equipment.

### CURRENT STAND CONDITION:

Stand 24 is a well stocked Softwood dominated mixed wood type with a total basal area of 110 ft<sup>2</sup>, of that 50 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Balsam fir, Red spruce, White birch, Red maple and Yellow birch. The mean stand diameter is 7.9 inches. The stand is weighted towards the medium saw timber size class. The White birch is in severe decline and the majority of Balsam fir is mature. The understory is well stocked with Red spruce seedling and saplings.

Stand 34 is a well stocked Northern hardwood type with a total basal area of 82 ft<sup>2</sup>, of that 35 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Balsam fir, Red Spruce. The mean stand diameter is 8.4 inches. The stand is weighted towards the medium saw timber size class. The current stand has a high level of residual stand damage and a fair amount of crown die-back. The understory varies greatly in stocking of acceptable regeneration, with small pockets of Sugar maple seedling and saplings in a patchy distribution around the stand.

Stand 43 is a well stocked Hardwood dominated mixed wood type with a total basal area of 88 ft<sup>2</sup>, of that 38 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Yellow birch, Balsam fir, White birch, Red spruce, Red maple. The mean stand diameter is 8.2 inches. The stand is weighted towards the medium saw timber size class. The White birch in the stand is in severe decline and the majority of Balsam fir is mature. The majority of the stand has good stocking in Red spruce seedlings and saplings in the understory.

Stand 44 is a well stocked Northern hardwood type with a basal area of 97 ft<sup>2</sup>, of that 42 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Balsam fir, Red spruce. The mean stand diameter is 7.6 inches. The stand is weighed towards the small saw timber size class. The stand has a fair amount of acceptable stocking in the of small saw timber size class.

Stand 46 is a poorly stocked Northern Hardwood type with a basal area of 40 ft<sup>2</sup>, of that 8 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech. The mean stand diameter is 6.8 inches. The stand is weighted towards the large pole timber size class. The stand is well stocked with Sugar maple and Yellow birch seedlings and saplings mixed in with beech and striped maple.

Stand 54 is a moderately stocked Northern hardwood stand with a basal area of 72 ft<sup>2</sup>, of that 28 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Red spruce, Balsam fir. The mean stand diameter is 8.2 inches. The stand is weighted towards the medium saw timber size class. The understory is dominated by beech and striped maple.

**REGENERATION: Does not include non-commercial species or Beech**

Stand	Seedlings per Acre	1"-3" Stems per Acre	Total Stems per Acre	Dominate Acceptable Species
LM-03-24	364	217	581	Red spruce
LM-03-34	198	92	290	Sugar maple
LM-03-43	290	120	410	Red spruce
LM-03-44	128	66	194	Sugar maple
LM-03-46	310	88	398	Sugar maple, Yellow birch
LM-03-54	120	33	153	Sugar maple, Yellow birch

**ELEVATION & TERRAIN:** Elevation ranges from 1700-2500 ft. with poorly drained soils. The ground is gradual in slope, but increases on the far western side of the harvest unit.

**SURROUNDING LANDSCAPE:** The unit is located at the end of Sims Hill Road and abuts the Lemington Town forest. The proposed activities are consistent with accepted forest management activities in the region and pose no adverse affect to adjacent biological communities. The harvest unit is not visible to the public.

**DESIRED GOAL OF HARVEST:**

- Capture value in declining timber
- Retain good quality trees as seed source and retained value for the long term
- Improve stand quality and provide openings for natural regeneration to occur where it is deficient
- Protect and release desirable advanced regeneration
- Protect riparian zones and wetland habitat

**RECOMMENDED TREATMENT PRESCRIPTION:**

Stand 24 will receive a Two Staged Shelterwood (2SS) (even age UVA code 3) and an Overstory Removal (OSR) (even age UVA code 4). The Shelterwood will target the at-risk and mature stems in areas of the stand that have higher stocking in acceptable growing stock. The target residual basal area is 60 ft<sup>2</sup>. The harvest will release quality growing stock and provide gaps to promote regeneration. The final cut will take place once acceptable levels of regeneration are established. Approximately 30-40% of the stand will receive this treatment. The remaining 60-70% of the stand will receive an Overstory Removal releasing the advanced Red spruce regeneration underneath an unacceptable and mature overstory. Care will be taken during layout to avoid the destruction or damage of regeneration.

Stand 34 will receive a Two Stage Shelterwood (2SS) (even age UVA code 3). The stand lacks an acceptable amount of regeneration and the majority of the overstory is unacceptable growing stock. A low density shelterwood with a residual basal area of 30-40 ft<sup>2</sup> will be utilized to discourage the establishment of beech in the understory. The shelterwood will be irregular in distribution and will target Sugar maple and Yellow birch with large crowns to provide shade and seed distribution. The portions of the stand will also receive 1-2 acre patches where quality and stocking are not insufficient for a Shelterwood. The patches will not affect the overall stand residual basal area of 30-40 ft<sup>2</sup>.

Stand 43 will receive a Two Staged Shelterwood (2SS) (even age UVA code 3) and Overstory Removal (OSR) (even age UVA code 4). 30-40% of the stand will receive an Overstory Removal where the overstory is in severe decline and the understory is well stocked with seedling and sapling sized Red spruce. The remaining portion of the stand will receive a Shelterwood. The harvest will target the at-risk and mature stems. The target residual basal area is 60 ft<sup>2</sup>. The harvest will release quality growing stock and provide gaps to promote regeneration.

Stand 44 will receive an Intermediate Thinning (ITH) (even age UVA code 2). The stand is well stocked with small saw timber, however many of the medium and large saw timber stems are in decline. The thinning will target the at-risk and mature stems and leave a target residual basal area of 60 ft<sup>2</sup>. This release the small saw timber size class and open up gaps for regeneration.

Stand 46 will receive an Overstory Removal (OSR) (even age UVA code 4). The overstory is in decline and the current stand conditions warrant removal. The understory has good stocking in Sugar maple and Yellow birch seedlings and saplings mixed within Beech and Non-commercial species. Care will be taken during layout to reduce the disturbance of the advanced regeneration. In small areas that do not have sufficient levels of acceptable regeneration a seed tree will be left to ensure regeneration. Yellow birch, Red Spruce or clumps of Sugar maple will be targeted as seed trees.

Stand 54 will receive a Seed Tree Patch cut (STC) (even age UVA code 5). The stand has many pockets of acceptable regeneration established in openings from a previous entry, however small pockets of mature and at risk stems remain and do not have sufficient levels of regeneration to warrant an Overstory Removal. The pockets of remaining overstory will be removed and individual Yellow birch or clumps of Red spruce or Sugar maple will be left to provide seed. Seed Tree Patches will not exceed 25 acres in size across the stand.

Pre-harvest layout will include:

- Identify and protect streams and significant wetlands using blue flagging for the centerline of non-eased stream buffers and the side of the stream for eased buffers and wetlands.
- Identify any potential problems and address them with the contractor.
- Identify former skid trails that can be used in current operations and flag new trails where needed using orange flagging.
- Flag stream crossings will have two pink flags and will designate stream crossing method with written instructions on flagging at crossing location and shown on LV's stream crossing worksheet.
- Require Feller-Buncher to lay all felled wood in skid trails to limit damage to the advanced regeneration and residual stand.
- Minimize skid trails to limit site disturbance.
- Establish bounds of harvest in flagged in pink or pink with "Timber Harvest Boundary" printed in black letters. Where the unit adjoins the property line the unit will be marked in blue flagging.

#### **DESIGNATION OF TIMBER FOR HARVEST:**

All stands within this unit (30) will be marked in blue or orange paint and three slashes with a C to indicate that all trees within the paint are to be cut. Marked timber will utilize blue or orange paint. Slashes or spots on at least two sides of the tree and a stump spot indicate removal. Skid trails will be designated with orange flagging. Trees marked with a "W", "X", "LX" or "SB" should not be harvested since their designations refer to wildlife trees (w), no cut trees (x), no cut-line trees (LX) and stream buffer (SB).

#### **STREAM / LEGACY BUFFER PRESCRIPTION:**

Larger order "blue line" streams and will have a 50' buffer where no operation will take place and crossings will be very limited. The 50' buffer will also apply to wetlands and other riparian features when appropriate. Blue flagging will be used to identify the buffer on the large order eased streams, and lower order non-eased streams will have blue flagging to designate the estimated stream centerline.

**TRUCK ROAD CONDITIONS:** No road upgrades are needed

#### **SKID TRAILS:**

Trails will be established by LV staff and designated in orange flagging. Any unacceptable trails will be identified as unsuitable and new trails will be put in place where needed.

#### **LANDINGS:**

Existing landings will be utilized for the harvest.

#### **REGULATORY CONSIDERATIONS:**

N/A

#### **PERMIT REQUIREMENTS:**

Heavy Cut (Act 15) notification required.

**HABITAT RETENTION DESIGNATION**

Retention will be utilized to retain native tree and vegetation species for the reoccupation of an implemented clear-cut or overstory removal. The retention will occur in the form of corridor retention along blue line and non blue line streams as well as through standing dead and coarse woody debris recruitment. These stands also feature sensitive hydrological features that will be avoided thus contributing to retention. For information on implementation techniques see pages 51-53 of the Forest Management Plan, Nov. 2007.

**THREATENED & ENDANGERED SPECIES CONSIDERATIONS:**

N/A

**SIGNAGE / NOTIFICATION REQUIREMENTS:**

Intent to cut notification to FP&R and VLT due to the CE & UVA

**CONSERVATION EASMENT CONDITIONS:**

As addressed in page 2 of the Champion Working Forest Conservation Easement it is required that two 16" or greater logs per acre of standing dead or downed trees be established or retained. This includes the recruitment of coarse woody debris by selecting trees that have the possibility of fulfilling the requirement in the future. For more detail see page 54 of the Forest Management Plan, Nov 2007.

**CLOSE OUT REQUIREMENTS:**

Refer to contract for specs.

**"FP&R COUNTY FORESTER USE ONLY"**

Parcel ID For Data Entry (by state)# \_\_\_\_\_  
 Year of Plan \_\_\_\_\_

Year of Entry \_\_\_\_\_  
 Year of Last Inspection \_\_\_\_\_

1) Landowner Name (last name, first name) Plum Creek

2) Landowner Address (Street, PO Box) 46 Mountain Avenue, P.O. Box 400

(Town) Fairfield (State) ME (Zip Code) 04937

*Lemington*

3) Town That Parcel Is Located In Ferndale 4) Total Forestry Acres in Parcel 86,262 (Grand list acreage, minus agricultural or non-productive land and exclusions)

5) Plan Preparer (last name, first name) Horton, Jonathan 6) Previous Owner (last name, first name) \_\_\_\_\_

7) Signature *[Signature]* 8) Date signed 11/3/09

9) Stand information: (this information is for data entry only and does not override what is in actual plan)

Stand #	Acres	Even-aged <sup>(1)</sup> Uneven-aged <sup>(2)</sup> (existing)	Predominant Site Class (1, 2, 3 or 4)	Timber Type	Quadratic M.S.D.	Total BA	AGS BA	Mgmt. Activities	Scheduled Date (± 3 yrs.)
LM-01-24	68.8	1	1-2	11	7.9	110	50	3/4	2011
LM-01-34	137	1	1-2	06	8.4	82	35	3	2011
LM-01-43	115	1	1-2	11	8.2	88	38	3/4	2011
LM-01-44	37	1	1-2	06	7.6	97	42	2	2011
LM-01-46	16	1	1-2	06	6.8	40	8	4	2011
LM-01-54	97	1	1-2	06	8.2	72	28	5	2011

<sup>1</sup> Update of an existing plan that includes all new stand descriptive data. Generally done on a 10-year cycle.

<sup>2</sup> Change to an existing plan, generally due to purchase or sale of a portion of the property, or a change in prescription. Does not change the 10-year cycle of the existing plan. If this form is filed with an amendment, indicate the amended information in the appropriate stand, and write an explanation in section 13. Amendments must be signed by the landowner(s).

- 10) No activity - (identify stand # and reasons) \_\_\_\_\_
- 11) Management Activities - other (identify stand #) \_\_\_\_\_ 54 will receive a Seed Tree Cut
- 12) Timber Types - other (identify stand #) \_\_\_\_\_
- 13) Amended prescriptions - (identify stand #) \_\_\_\_\_

**DEFINITIONS**

**FOREST TYPES**

01	aspen and/or white birch
02	white pine, red oak
03	white pine
04	hemlock
05	sugar maple
06	beech, birch, sugar maple
07	beech, red maple
08	spruce
09	spruce/fir
10	pioneer species
11	mixed wood (25%-65% softwood)
12	other (identify other in section 12)

ACRES-round off to nearest acre  
 EVEN-AGED-stands with two or less size classes  
 UNEVEN-AGED-stands with three or more size classes  
 SITE CLASS-predominant site class as defined by UVA standards  
 QUADRATIC MEAN STAND DIAMETER - to nearest inch  
 TOTAL BA-basal area to nearest ft<sup>2</sup>/acre  
 AGS BA (acceptable growing stock basal area) to nearest ft<sup>2</sup>/acre

MANAGEMENT ACTIVITY CODES (if one of the following choices reasonably describes the planned management activity, use it. If not, use #13 other and describe the management activity in Section 11. Note these descriptions are for choosing codes only; they are not the silvicultural standards).

1. Non-commercial forest stand improvement - A treatment made to improve the composition, structure, quality, or growth of young stands.
- EVEN-AGED MANAGEMENT** (Two or less distinct size classes)
  2. Intermediate thinning - Reduce stocking to B level, or remove up to 33% of basal area in densely overstocked stands. AGS basal area shall not be reduced below recommendations of appropriate guide or 60 sq. ft./ac. when no guide is available.
  3. Shelterwood cut - Stand basal area reduced to between 30 and 70 sq. ft. for hardwoods, 80 to 120 sq. ft. for softwoods.
  4. Overstory removal cut - Removing overstory after a new featured stand has become established. This applies to two-aged as well as recently regenerated stands. After harvest, residual stand should have minimum of sixty (60) square feet of acceptable growing stock or 350 stems/acre for stands less than six (6) inches MSD.
  5. Clearcut - Stand basal area reduced below thirty (30) square feet.
  6. Progressive clearcutting - Removing a portion of a stand in strips or patches, to be followed by similar treatments at predetermined dates until entire area is clearcut. If you choose this option, indicate the total time period from first to last cut (e.g., 30 years) in section 13.
- UNEVEN-AGED MANAGEMENT** (Three or more distinct size classes) (NOTE: ratio of AGS to total basal area should be maintained or increased through any management activities.)
  7. Individual Tree Selection - Harvest or improvement cutting that maintains a fairly uniform and continuous crown cover appropriate for regenerating tolerant species.
  8. Group Selection - Harvest of groups of trees roughly 1/20 to 2 acres in size. Appropriate for regeneration of species of all tolerance groups.

**MISCELLANEOUS CHOICES**

9. Salvage cut - Removing a portion of a stand because of damage or disease. Resulting residual stand may not fit standards in guides.
10. Sugarbush thinning - Cut designed with the sole objective of establishing or improving a sugarbush. Cut should follow sugarbush guides.
11. Species conversion - Cut done usually in a mixed stand to favor certain species. Treatment should not favor species that are "off site".
12. No activity - Indicate reason such as "stand understocked", in section 10.
13. Other - In cases where none of the above choices comes reasonably close to describing the management activity, put your own description in section 11.
14. Crop Tree Release - Release of timber crop trees on at least 2 sides. For additional information refer to "Crop Tree Management in Eastern Hardwoods". (NA-TP-19-93).



**VT Dept. of Forests, Parks & Recreation - USE VALUE APPRAISAL FOREST MANAGEMENT PLAN - Form 2, Page 1**

**Applicant Name:** Plum Creek

**Address:** 49 Mountain Ave  
PO Box 400  
Fairfield, Maine 04937

**Applicant Phone:** 802-334-8402  
**Applicant e-mail:** jhorton@landvest.com

**Town:** Lemington

**Grand List Description:** : 86,262

<b>Stand No.</b> LM-03-24	<b>Acres</b> 68.8	<b>Site Class</b> I-II	<b>Access Distance</b> < 1
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**Stand History:** Harvested by Champion Paper Co. approximately 20-25 years ago.

**Stand Description**

**EVEN-AGE**  **X**

Or

**UNEVEN-AGE** \_\_\_\_\_

**Forest Type:** SH3B

**Stocking Level:** B-line

**Quadratic MSD:** 7.9

**Total BA** 110 **AGS BA** 50

**Long Range Objective**

**EVEN-AGE Management**  
**Present Stand Age:** 65-70  
**Rotation Age:** 80

**Scheduled Treatment**  
**(Type and Year):** Shelterwood(3)  
Overstory Removal (4) 2011

**Forest Health Conditions:** The stand has high residual stand damage. Beech bark *Nectria* complex.

**UNEVEN-AGE MANAGEMENT**  
*(Complete diameter distribution table and/or Q information)*

**BA 6-10"** AGS UGS Cull

**BA 12-14"** AGS UGS Cull

**BA 16"+** AGS UGS Cull

**Q Factor:** Present Future

**UNEVEN-AGE Management**  
**Species Objectives:**  
**Cutting Cycle:**  
**Residual BA:**  
**Diameter Objectives:**

**Scheduled Treatment**  
**(Type and Year):**

**Description of Stand Conditions** Stand 24 is a well stocked Softwood dominated mixed wood type with at total basal area of 110 ft<sup>2</sup>, of that 50 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Balsam fir, Red spruce, White birch, Red maple and Yellow birch. The mean stand diameter is 7.9 inches. The stand is weighted towards the medium saw timber size class. The White birch is in severe decline and the majority of Balsam fir is mature. The understory is well stocked with Red spruce seedling and saplings.

**Stand Cruise Data:** Prism Factor/Plot size 10 No. of Points/Plots Sampled 6 Sampling Date(s): 10/15/09

VT Dept. of Forests, Parks & Recreation - USE VALUE APPRAISAL FOREST MANAGEMENT PLAN - Form 2, Page 1

Applicant Name: Plum Creek

Address: 49 Mountain Ave  
PO Box 400  
Fairfield, Maine 04937

Applicant Phone: 802-334-8402  
Applicant e-mail: jhorton@landvest.com

Town: Lemington

Grand List Description: : 86,262

Stand No. LM-03-34	Acres 137	Site Class I-II	Access Distance < 1
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Stand History: Harvested by Champion Paper Co. approximately 20-25 years ago.

Stand Description

EVEN-AGE X

Or

UNEVEN-AGE \_\_\_\_\_

Forest Type: H3B

Stocking Level: B-line

Quadratic MSD: 8.4

Total BA 82 AGS BA 35

Long Range Objective

EVEN-AGE Management  
Present Stand Age: 70-75  
Rotation Age: 80

Scheduled Treatment  
(Type and Year): Shelterwood (3)  
2011

Forest Health Conditions: The stand has high residual stand damage. Beech bark *Nectria* complex.

UNEVEN-AGE MANAGEMENT  
(Complete diameter distribution table and/or Q information)

BA 6-10" \_\_\_\_\_ AGS \_\_\_\_\_ UGS \_\_\_\_\_ Cull \_\_\_\_\_

BA 12-14" \_\_\_\_\_ AGS \_\_\_\_\_ UGS \_\_\_\_\_ Cull \_\_\_\_\_

BA 16"+ \_\_\_\_\_ AGS \_\_\_\_\_ UGS \_\_\_\_\_ Cull \_\_\_\_\_

Q Factor: Present \_\_\_\_\_ Future \_\_\_\_\_

UNEVEN-AGE Management

Species Objectives:

Cutting Cycle:

Residual BA:

Diameter Objectives:

Scheduled Treatment

(Type and Year):

Description of Stand Conditions Stand 34 is a well stocked Northern hardwood type with a total basal area of 82 ft<sup>2</sup>, of that 35 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Balsam fir, Red Spruce. The mean stand diameter is 8.4 inches. The stand is weighted towards the medium saw timber size class. The current stand has a high level of residual stand damage and a fair about of crown die-back. The understory varies greatly in stocking of acceptable regeneration, with small pockets of Sugar maple seedling and saplings in a patchy distribution around the stand.

Stand Cruise Data: Prism Factor/Plot size \_\_\_\_\_ 10 \_\_\_\_\_

No. of Points/Plots Sampled \_\_\_\_\_ 8 \_\_\_\_\_

Sampling Date(s): 10/13/09

**VT Dept. of Forests, Parks & Recreation - USE VALUE APPRAISAL FOREST MANAGEMENT PLAN - Form 2, Page 1**

**Applicant Name:** Plum Creek  
**Address:** 49 Mountain Ave  
 PO Box 400  
 Fairfield, Maine 04937  
**Applicant Phone:** 802-334-8402  
**Applicant e-mail:** jhorton@landvest.com

**Town:** Lemington

**Grand List Description:** : 86,262

<b>Stand No.</b> LM-03-43	<b>Acres</b> 115	<b>Site Class</b> I-II	<b>Access Distance</b> < 1
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**Stand History:** Harvested by Champion Paper Co. approximately 20-25 years ago.

**Stand Description**

EVEN-AGE X

Or

UNEVEN-AGE \_\_\_\_\_

**Forest Type:** H3B

**Stocking Level:** B-line

**Quadratic MSD:** 8.2

**Total BA** 88      AGS BA 38

Long Range Objective

**EVEN-AGE Management**  
 Present Stand Age: 70-75  
 Rotation Age: 80

**Scheduled Treatment**  
 (Type and Year): Shelterwood (3),  
 OSR (4) 2011

**UNEVEN-AGE Management**  
**Species Objectives:**  
**Cutting Cycle:**  
**Residual BA:**  
**Diameter Objectives:**

**Scheduled Treatment**  
 (Type and Year):

**UNEVEN-AGE MANAGEMENT**  
 (Complete diameter distribution table and/or Q information)

BA 6-10"    AGS    UGS    Cull

BA 12-14"    AGS    UGS    Cull

BA 16"+    AGS    UGS    Cull

**Q Factor:**    Present    Future

**Description of Stand Conditions** Stand 43 is a well stocked Hardwood dominated mixed wood type with a total basal area of 88 ft<sup>2</sup>, of that 38 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Yellow birch, Balsam fir, White birch, Red spruce, Red maple. The mean stand diameter is 8.2 inches. The stand is weighted towards the medium saw timber size class. The White birch in the stand is in severe decline and the majority of Balsam fir is mature. The majority of the stand has good stocking in Red spruce seedlings and saplings in the understory.

**Stand Cruise Data:** Prism Factor/Plot size 10      No. of Points/Plots Sampled 8      Sampling Date(s): 10/13/09

**VT Dept. of Forests, Parks & Recreation - USE VALUE APPRAISAL FOREST MANAGEMENT PLAN - Form 2, Page 1**

**Applicant Name:** Plum Creek  
**Address:** 49 Mountain Ave  
 PO Box 400  
 Fairfield, Maine 04937  
**Applicant Phone:** 802-334-8402  
**Applicant e-mail:** jhorton@landvest.com

**Town:** Lemington  
**Grand List Description:** : 86,262

<b>Stand No.</b> LM-03-44	<b>Acres</b> 37	<b>Site Class</b> I-II	<b>Access Distance</b> < 1
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**Stand History:** Harvested by Champion Paper Co. approximately 20-25 years ago.

**Stand Description**  
 EVEN-AGE X  
 Or  
 UNEVEN-AGE \_\_\_\_\_  
**Forest Type:** H3A  
**Stocking Level:** B-line  
**Quadratic MSD:** 7.6  
**Total BA** 97 AGS BA 42

**Long Range Objective**  
 EVEN-AGE Management  
 Present Stand Age: 70-75  
 Rotation Age: 80  
**Scheduled Treatment**  
 (Type and Year): Shelterwood (3) 2011

**UNEVEN-AGE MANAGEMENT**  
 (Complete diameter distribution table and/or Q information)  
 BA 6-10"     AGS     UGS     Cull      
 BA 12-14"     AGS     UGS     Cull      
 BA 16"+     AGS     UGS     Cull      
**Q Factor:** Present     Future    

**UNEVEN-AGE Management**  
 Species Objectives:  
 Cutting Cycle:  
 Residual BA:  
 Diameter Objectives:  
**Scheduled Treatment**  
 (Type and Year):

**Forest Health Conditions:** The stand has high residual stand damage. Beech bark *Nectria* complex.

**Description of Stand Stand 44** is a well stocked Northern hardwood type with a basal area of 97 ft<sup>2</sup>, of that 42 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Balsam fir, Red spruce. The mean stand diameter is 7.6 inches. The stand is weighed towards the small saw timber size class. The stand has a fair amount acceptable stocking in the <sup>CSV</sup> of small saw timber size class.

**Stand Cruise Data:** Prism Factor/Plot size    10    No. of Points/Plots Sampled    5    Sampling Date(s): 10/13/09

**VT Dept. of Forests, Parks & Recreation - USE VALUE APPRAISAL FOREST MANAGEMENT PLAN - Form 2, Page 1**

**Applicant Name:** Plum Creek  
**Address:** 49 Mountain Ave  
 PO Box 400  
 Fairfield, Maine 04937  
**Applicant Phone:** 802-334-8402  
**Applicant e-mail:** jhorton@landvest.com

**Grand List Description:** : 86,262

<p><b>Stand No. LM-03-46</b></p>	<p><b>Acres</b> 16</p>	<p><b>Site Class</b> I-II</p>	<p><b>Access Distance</b> &lt; 1</p>	<p><b>Stand History:</b> Harvested by Champion Paper Co. approximately 20-25 years ago.</p>	<p><b>Stand Description</b>                  EVEN-AGE <u>X</u>                  Or                  UNEVEN-AGE _____  <b>Forest Type:</b> <u>H3C</u>  <b>Stocking Level:</b> <u>C-line</u>  <b>Quadratic MSD:</b> <u>6.8</u>  <b>Total BA</b> <u>40</u>    AGS BA <u>8</u></p>	<p><b>Long Range Objective</b>                  EVEN-AGE Management                  Present Stand Age: 60-70                  Rotation Age: 80                  Scheduled Treatment                  (Type and Year): OSR (4) 2011                  UNEVEN-AGE Management                  Species Objectives:                  Cutting Cycle:                  Residual BA:                  Diameter Objectives:                  Scheduled Treatment                  (Type and Year):</p>
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**Forest Health Conditions:** The stand has high residual stand damage. Beech bark *Nectria* complex.

**Description of Stand Conditions:** Stand 46 is a poorly stocked Northern Hardwood type with a basal area of 40 ft<sup>2</sup>, of that 8 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech. The mean stand diameter is 6.8 inches. The stand is weighted towards the large pole timber size class. The stand is well stocked with Sugar maple and Yellow birch seedlings and saplings mixed in with beech and striped maple.

**Stand Cruise Data:** Prism Factor/Plot size 10    No. of Points/Plots Sampled 3    Sampling Date(s): 10/13/09

**Applicant Name:** Plum Creek  
**Address:** 49 Mountain Ave  
 PO Box 400  
 Fairfield, Maine 04937  
**Applicant Phone:** 802-334-8402  
**Applicant e-mail:** jhorton@landvest.com

**Town:** Lemington  
**Grand List Description:** : 86,262

Stand No.	Acres	Site Class	Access Distance	Long Range Objective
LM-03-54	97	I-II	< 1	<p><u>Stand Description</u>                      EVEN-AGE <u>X</u>                      Or                      UNEVEN-AGE _____                      Forest Type: <u>H3B</u>                      Stocking Level: <u>B-line</u>                      Quadratic MSD: <u>8.2</u>                      Total BA <u>72</u>      AGS BA <u>28</u></p> <p><u>Scheduled Treatment</u>                      (Type and Year): Seed Tree (5) 2011</p> <p><u>UNEVEN-AGE Management</u>                      Species Objectives:                      Cutting Cycle:                      Residual BA:                      Diameter Objectives:</p> <p><u>Scheduled Treatment</u>                      (Type and Year):</p>
<p><b>Stand History:</b> Harvested by Champion Paper Co. approximately 20-25 years ago.</p>				<p><u>UNEVEN-AGE MANAGEMENT</u>                      (Complete diameter distribution table and/or Q information)</p> <p>BA 6-10"    AGS    UGS    Cull                      BA 12-14"    AGS    UGS    Cull                      BA 16"+    AGS    UGS    Cull</p> <p>Q Factor:    Present    Future</p>


**Description of Stand Stand 54** is a moderately stocked Northern hardwood stand with a basal area of 72 ft<sup>2</sup>, of that 28 ft<sup>2</sup> is acceptable growing stock. The stand is dominated by Sugar maple, Yellow birch, Beech, Red spruce, Balsam fir. The mean stand diameter is 8.2 inches. The stand is weighted towards the medium saw timber size class. The understory is dominated by beech and striped maple.

**Stand Cruise Data:** Prism Factor/Plot size 10      No. of Points/Plots Sampled 6      Sampling Date(s): 10/15/09

MANAGEMENT SCHEDULE  
USE VALUE APPRAISAL FOREST MANAGEMENT PLAN

STAND NO.	YEAR	MANAGEMENT PRACTICES TO BE ACCOMPLISHED DURING NEXT 10 YEAR PLAN:	Silvicultural Guide or Tech Ref. Prescription #/Letter, if appropriate
LM-03-24	2011	<p>Stand 24 will receive a Two Staged Shelterwood (2SS) (even age UVA code 3) and an Overstory Removal (OSR) (even age UVA code 4). The Shelterwood will target the at-risk and mature stems in areas of the stand the have higher stocking in acceptable growing stock. The target residual basal area is 60 ft<sup>2</sup>. The harvest will release quality growing stock and provide gaps to promote regeneration. The final cut will take place once acceptable levels of regeneration are established. Approximately 30-40% of the stand will receive this treatment. The remaining 60-70% of the stand will receive an Overstory Removal releasing the advanced Red spruce regeneration underneath an unacceptable and mature overstory. Care will be taken during layout to avoid the destruction or damage of regeneration.</p>	<p>Guide:</p>
34	2011	<p>Stand 34 will receive a Two Stage Shelterwood (2SS) (even age UVA code 3). The stand lacks an acceptable amount of regeneration and the majority of the overstory is unacceptable growing stock. A low density shelterwood with a residual basal area of 30-40 ft<sup>2</sup> will be utilized to discourage the establishment of beech in the understory. The shelterwood will be irregular in distribution and will target Sugar maple and Yellow birch with large crowns to provide shade and seed distribution. The portions of the stand will also receive 1-2 acre patches where quality and stocking are not sufficient for a Shelterwood. The patches will not affect the overall stand residual basal area of 30-40 ft<sup>2</sup>.</p>	<p>Guide:</p>
43	2011	<p>Stand 43 will receive a Two Staged Shelterwood (2SS) (even age UVA code 3) and Overstory Removal (OSR) (even age UVA code 4). 30-40% of the stand will receive an Overstory Removal where the overstory is in severe decline and the understory is well stocked with seedling and sapling sized Red spruce. The remaining portion of the stand will receive a Shelterwood. The harvest will target the at-risk and mature stems. The target residual basal area is 60 ft<sup>2</sup>. The harvest will release quality growing stock and provide gaps to promote regeneration.</p>	<p>Guide:</p>

STAND NO.	YEAR	MANAGEMENT PRACTICES TO BE ACCOMPLISHED DURING NEXT 10 YEAR PLAN:	Silvicultural Guide or Tech Ref. Prescription #/Letter, if appropriate
44	2011	Stand 44 will receive an Intermediate Thinning (ITH) (even age UVA code 2). The stand is well stocked with small saw timber, however many of the medium and large saw timber stems are in decline. The thinning will target the at-risk and mature stems and leave a target residual basal area of 60 ft <sup>2</sup> . This release the small saw timber size class and open up gaps for regeneration.	Guide:
46	2011	Stand 46 will receive and Overstory Removal (OSR) (even age UVA code 4). The overstory is in decline and the current stand conditions warrant removal. The understory has good stocking in Sugar maple and Yellow birch seedlings and saplings mixed within Beech and Non-commercial species. Care will be taken during layout to reduce the disturbance of the advanced regeneration. In small areas that do not have sufficient levels of acceptable regeneration a seed tree will be left to ensure regeneration. Yellow birch, Red Spruce or clumps of Sugar maple will be targeted as seed trees.	Guide:
54	2011	Stand 54 will receive a Seed Tree Patch cut (STC) (even age UVA code 5). The stand has many pockets of acceptable regeneration established in openings from a previous entry, however small pockets of mature and at risk stems remain and do not have sufficient levels of regeneration to warrant an Overstory Removal. The pockets of remaining overstory will be removed and individual Yellow birch or clumps of Red spruce or Sugar maple will be left to provide seed. Seed Tree Patches will not exceed 25 acres in size across the stand.	


 DATE: 11/3/09

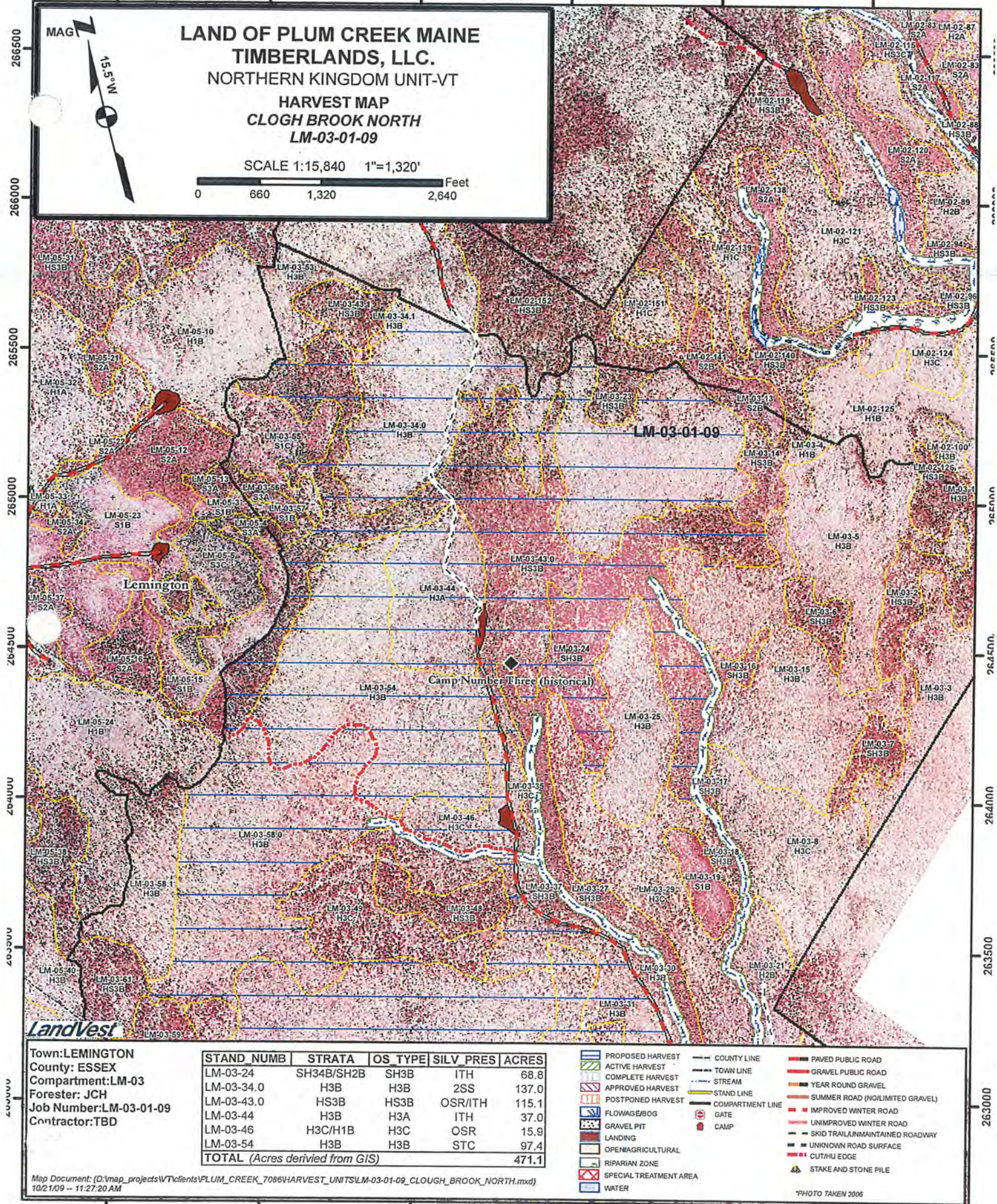
PREPARED BY: Jonathan Horton DATE: 10/14/09

CERTIFIED BY: Matthew J. Pollock DATE: 11/16/09



**LAND OF PLUM CREEK MAINE  
TIMBERLANDS, LLC.  
NORTHERN KINGDOM UNIT-VT  
HARVEST MAP  
CLOUGH BROOK NORTH  
LM-03-01-09**

SCALE 1:15,840 1"=1,320'  
0 660 1,320 2,640 Feet



Lemington

Camp Number Three (historical)

**LandVest**  
Town: LEMINGTON  
County: ESSEX  
Compartment: LM-03  
Forester: JCH  
Job Number: LM-03-01-09  
Contractor: TBD

STAND_NUMB	STRATA	OS TYPE	SILV PRES	ACRES
LM-03-24	SH34B/SH2B	SH3B	ITH	68.8
LM-03-34.0	H3B	H3B	2SS	137.0
LM-03-43.0	HS3B	HS3B	OSR/ITH	115.1
LM-03-44	H3B	H3A	ITH	37.0
LM-03-46	H3C/H1B	H3C	OSR	15.9
LM-03-54	H3B	H3B	STC	97.4
<b>TOTAL (Acres derived from GIS)</b>				<b>471.1</b>

- PROPOSED HARVEST
- ACTIVE HARVEST
- COMPLETE HARVEST
- APPROVED HARVEST
- POSTPONED HARVEST
- FLOWAGE/BOG
- GRAVEL PIT
- LANDING
- OPEN/AGRICULTURAL
- RIPARIAN ZONE
- SPECIAL TREATMENT AREA
- WATER
- COUNTY LINE
- TOWN LINE
- STREAM
- COMPARTMENT LINE
- GATE
- CAMP
- PAVED PUBLIC ROAD
- GRAVEL PUBLIC ROAD
- YEAR ROUND GRAVEL
- SUMMER ROAD (NO/UNLIMITED GRAVEL)
- IMPROVED WINTER ROAD
- UNIMPROVED WINTER ROAD
- SKID TRAIL/UNMAINTAINED ROADWAY
- UNKNOWN ROAD SURFACE
- CUT/HU EDGE
- STAKE AND STONE PILE

568000 VT STATE PLANE NAD 83 METERS

568500

569000

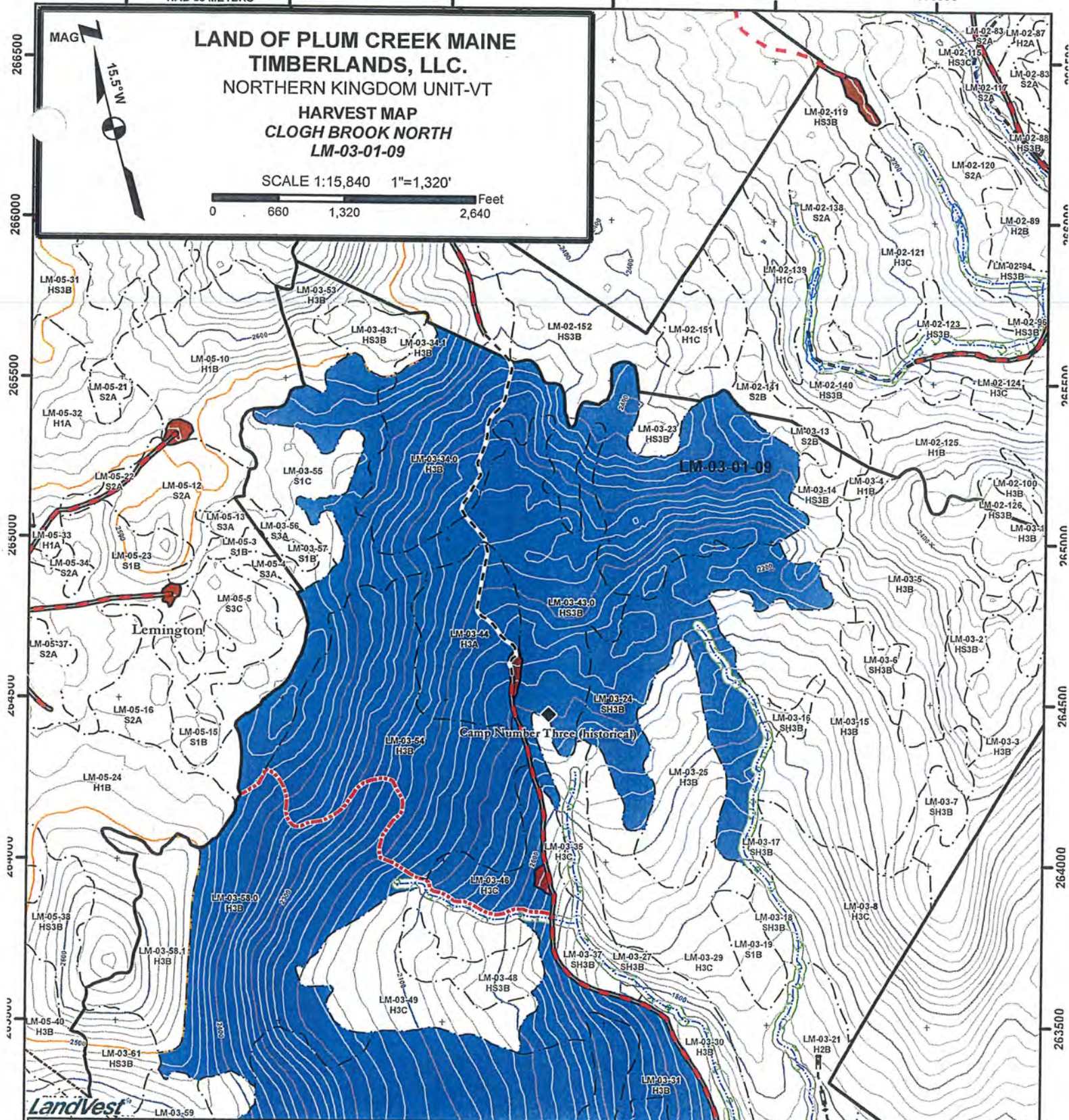
569500

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570500

**LAND OF PLUM CREEK MAINE  
TIMBERLANDS, LLC.  
NORTHERN KINGDOM UNIT-VT  
HARVEST MAP  
CLOGH BROOK NORTH  
LM-03-01-09**

SCALE 1:15,840 1"=1,320'  
0 660 1,320 2,640 Feet



Town: LEMINGTON  
County: ESSEX  
Compartment: LM-03  
Forester: JCH  
Job Number: LM-03-01-09  
Contractor: TBD

STAND_NUMB	STRATA	OS_TYPE	SILV_PRES	ACRES
LM-03-24	SH3B/SH2B	SH3B	ITH	68.8
LM-03-34.0	H3B	H3B	2SS	137.0
LM-03-43.0	HS3B	HS3B	OSR/ITH	115.1
LM-03-44	H3B	H3A	ITH	37.0
LM-03-46	H3C/H1B	H3C	OSR	15.9
LM-03-54	H3B	H3B	STC	97.4
<b>TOTAL (Acres derived from GIS)</b>				<b>471.1</b>

- PROPOSED HARVEST
- ACTIVE HARVEST
- COMPLETE HARVEST
- APPROVED HARVEST
- POSTPONED HARVEST
- FLOWAGE/BOG
- GRAVEL PIT
- LANDING
- OPEN/AGRICULTURAL
- RIPARIAN ZONE
- SPECIAL TREATMENT AREA
- WATER
- COUNTY LINE
- TOWN LINE
- STREAM
- STAND LINE
- COMPARTMENT LINE
- 20 FT CONTOUR
- 100 FT CONTOUR
- 2500 FT CONTOUR
- GATE
- CAMP
- PAVED PUBLIC ROAD
- GRAVEL PUBLIC ROAD
- YEAR ROUND GRAVEL
- SUMMER ROAD (UNLIMITED GRAVEL)
- IMPROVED WINTER ROAD
- UNIMPROVED WINTER ROAD
- SKID TRAIL/MAINTAINED ROADWAY
- UNKNOWN ROAD SURFACE
- CUTLINE EDGE

Map Document: (D:\map\_projects\VT\clients\PLUM\_CREEK\_7086\HARVEST\_UNITS\LM-03-01-09\_CLOGH\_BROOK\_NORTH.mxd)  
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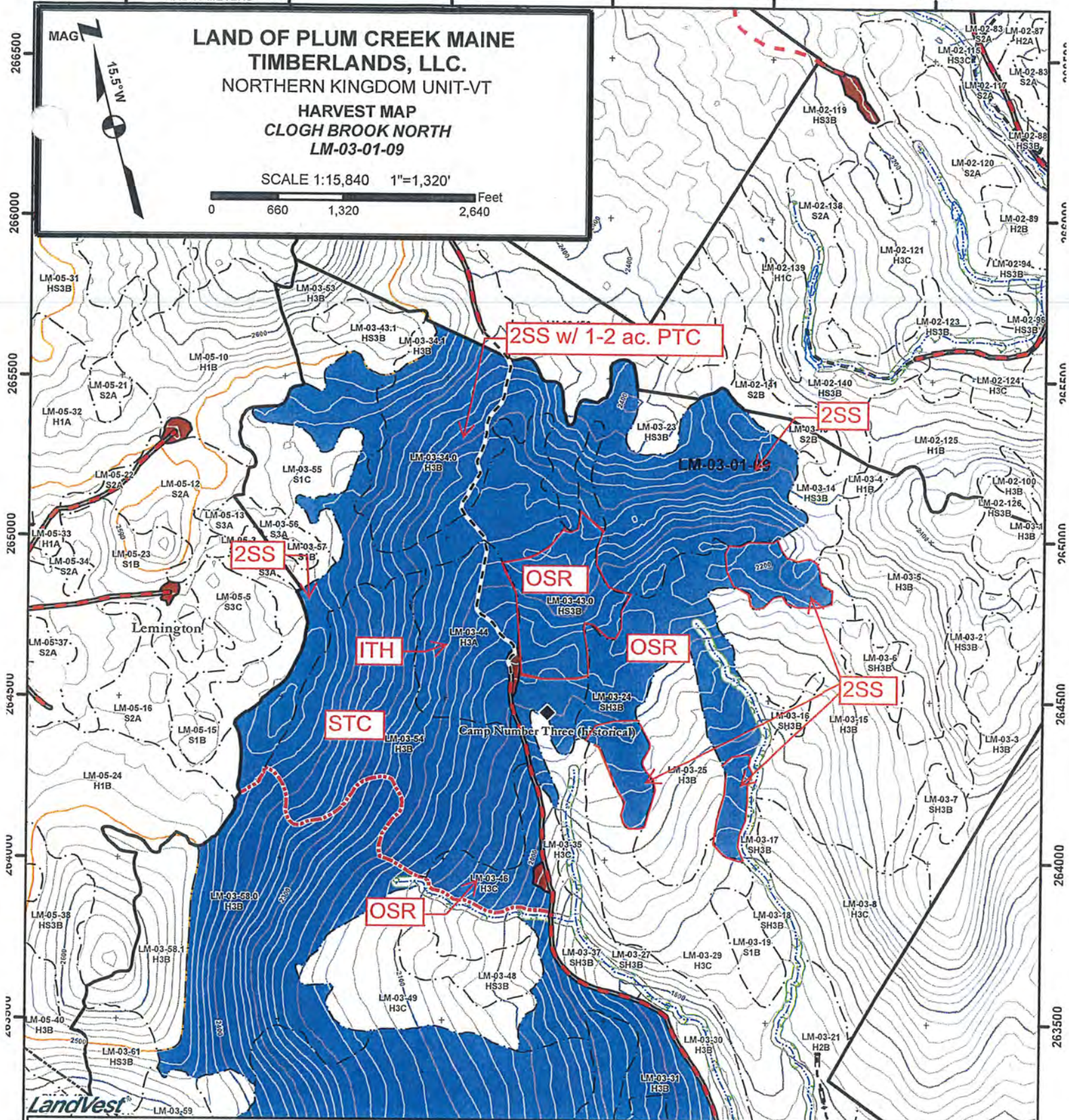
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**LAND OF PLUM CREEK MAINE  
TIMBERLANDS, LLC.  
NORTHERN KINGDOM UNIT-VT  
HARVEST MAP  
CLOGH BROOK NORTH  
LM-03-01-09**

SCALE 1:15,840 1"=1,320'  
0 660 1,320 2,640 Feet

2SS w/ 1-2 ac. PTC

2SS

2SS

OSR

ITH

OSR

2SS

STC

OSR

Camp Number Three (Historical)

Town: LEMINGTON  
County: ESSEX  
Compartment: LM-03  
Forester: JCH  
Job Number: LM-03-01-09  
Contractor: TBD

STAND_NUMB	STRATA	OS_TYPE	SILV_PRES	ACRES
LM-03-24	SH34B/SH2B	SH3B	ITH	68.8
LM-03-34.0	H3B	H3B	2SS	137.0
LM-03-43.0	HS3B	HS3B	OSR/ITH	115.1
LM-03-44	H3B	H3A	ITH	37.0
LM-03-46	H3C/H1B	H3C	OSR	15.9
LM-03-54	H3B	H3B	STC	97.4
<b>TOTAL (Acres derived from GIS)</b>				<b>471.1</b>

- PROPOSED HARVEST
- ACTIVE HARVEST
- COMPLETE HARVEST
- APPROVED HARVEST
- POSTPONED HARVEST
- FLOWAGE/BOG
- GRAVEL PIT
- OPEN/AGRICULTURAL
- RIPARIAN ZONE
- SPECIAL TREATMENT AREA
- WATER
- COUNTY LINE
- TOWN LINE
- STREAM
- STAND LINE
- COMPARTMENT LINE
- 20 FT CONTOUR
- 2500 FT CONTOUR
- GATE
- CAMP
- PAVED PUBLIC ROAD
- GRAVEL PUBLIC ROAD
- YEAR ROUND GRAVEL
- SUMMER ROAD (NO LIMITED GRAVEL)
- IMPROVED WINTER ROAD
- UNIMPROVED WINTER ROAD
- SKID TRAIL/MAINTAINED ROADWAY
- UNKNOWN ROAD SURFACE
- CUTTHU EDGE

Map Document: (D:\map\_projects\VT\clients\PLUM\_CREEK\_7086\HARVEST\_UNITS\LM-03-01-09\_CLOGH\_BROOK\_NORTH.mxd)  
10/21/09 -- 11:27:20 AM

EX 23

LM-03-01-09



State of Vermont  
Department of Forests, Parks and Recreation  
1229 Portland Street, Suite 201  
St. Johnsbury, VT 05819-2099  
www.vtfpr.org

[phone] 802-751-0110  
[fax] 802-748-6687  
[tdd] 800-253-0191

Agency of Natural Resources

REF: HC#05.24.09  
Simms Hill  
Clagh Brook North

### Notice of Determination

To the Town of Lemington:

Consistent with the rules established under the Heavy Cut Provision of 10 VSA § 2622 and in conformance with the Regulation of Heavy Cutting of 10 VSA § 2625, the following determination has been issued for land owned by Plum Creek Timberlands in the town of Lemington.

#### EXEMPTIONS:

- Harvest is not subject to regulations under provision of this law.
- The proposed heavy cut is intended to carry out an agricultural conversion plan.
- The proposed heavy cut is a conversion subject to regulation by a District Commission and the Environmental Board under 10 VSA, Chapter 151, Act 250, or by the Public Service Board, Title 30.
- The proposed heavy cut is consistent with one of the following:
  - A forest management plan currently in effect and approved by the Department under the Current Use Assessment program,
  - A chip harvesting plan currently in effect and approved by the Department of Fish and Wildlife under a permit issued under 40 VSA Section 248,
  - A forest management plan currently in effect and approved by the Department under rules in effect at the time of approval of the plan.

#### FOR PARCELS THAT DO NOT QUALIFY FOR AN EXEMPTION:

- The proposal is in conformance with rules adopted by the Department and the cut may proceed.
- The proposal is not in conformance with rules adopted by the Department and the cut may not proceed.

Virginia A. Anderson  
Chief, Forest Resource Management

11-24-09  
Date



**FORESTRY  
CENTENNIAL  
CELEBRATION**

# DEPARTMENT OF FORESTS, PARKS AND RECREATION

RECEIVED  
 NOV 16 2009  
 HC # 05.24.09  
 File # 16.32.24

**1. APPLICATION: (TO BE COMPLETED BY THE LANDOWNER)**

This form is to be completed and submitted to one of the DISTRICT OFFICES (list attached) of the Division of Forestry, Department of Forests, Parks and Recreation, Agency of Natural Resources. Intent to Cut notification is needed **ONLY IF** the landowner plans to implement a **HEAVY CUT** of **FORTY ACRES or more**. A heavy cut is defined as "a harvest leaving a residual stocking level below the C-line as defined by the U.S. Department of Agriculture silvicultural stocking guides for the applicable timber type." Incomplete applications will be returned within 48 hours of such determination.

Landowner's Name: Plum Creek Timberlands	
Day Time Phone: Chris Fife 207-446-1904	Evening Phone: Jonathan Horton 603-246-8800 Ext. 16
E-mail Address: Chris.Fife@plumcreek.com jhorton@landvest.com	
Home Address: LandVest 851 Washington St. W. Stewartstown, NH 03597	
Business Address: 49 Mountain Ave P.O. Box 400 Fairfield ME 04937	
Location of Parcel: (County, Town, and Road Name) Essex, Lemington, Simms Hill	
Size of Parcel: <u>86,262</u> (acres)	Size of Proposed Heavy Cut: <u>274+/-</u> (acres)
Location of other owned parcels which have been heavily cut within 2 miles: Essex, Lemington, Meacham Road	
Acres involved in heavy cut within past five years: 1,897	

05.24.09

2. EXEMPTIONS: (TO BE COMPLETED BY THE LANDOWNER)

No further review is required if one of the following conditions apply:

- This notice is for informational purposes only, even though the harvest is not subject to regulations under the provisions of this law.
- I (the landowner) certify that the proposed heavy cut is intended to carry out an agricultural conversion plan, and that the conversion will be completed and the land will be in agricultural production within five years.
- I (the landowner) certify that the proposed heavy cut is a conversion subject to regulation by a district commission and the environmental board under 10 V.S.A. chapter 151 Act 250 or by the public service board Title 30.
- I (the landowner) certify that the proposed heavy cut is consistent with one of the following:
  - 1. A forest management plan currently in effect and approved by the department under the current use assessment program.
  - 2. A chip harvesting plan currently in effect and approved by the department of fish and wildlife under a permit issued under 30 V.S.A. §248.
  - 3. A forest management plan currently in effect and approved by the department under rules in effect at the time of approval of the plan.

Landowner Certification:

I, Christopher Fife for Plum Creek, as landowner of record, do attest and certify that the items checked above are true and represent the conditions under which I apply for an Exemption to Proceed under the Heavy Cut Provision of 10 V.S.A. §2622.

*Christopher Fife*  
Signature

10/16/09  
Date

**DETERMINATION OF EXEMPTION (TO BE COMPLETED BY FPR)**

I have reviewed this Notification and have determined that **NO FURTHER REVIEW** is required:

Dick Greenwood  
Name (printed or typed)

*Dick Greenwood*  
Signature  
Department Field Forester

20 NOV 09  
Date

## Chris Fife

---

**From:** Dan Kilborn [Dan@vlt.org]  
**Sent:** Friday, January 08, 2010 4:06 PM  
**To:** Chris Fife  
**Subject:** RE: Winter roads  
**Attachments:** image001.gif

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

That sounds good. Can you give me an update on who is working and where as of now?

No I don't think we walked stands in that harvest block. Is it something that we could look at on the 26th?

I heard that Jon Horton is no longer at or about to leave LandVest. I'm curious of the status and if there has been a replacement for him?

Have a good weekend, dan

---

**From:** Chris Fife [mailto:Chris.Fife@plumcreek.com]  
**Sent:** Thursday, January 07, 2010 8:09 AM  
**To:** Dan Kilborn  
**Subject:** RE: Winter roads


Let's shoot for the 26<sup>th</sup>. Meet at 7:30 at the Lemington town office? Lafoe will be in Lemington by then too so we should be able to visit both jobs.

I was in Mechum swamp yesterday walking stand LM 02-48 that was approved for groups under Essex and the prescription seems wrong. The stand is regenerated to pole size fir and spruce and yellow birch and red maple poles in the old trails and openings. Mixed in all the poles is mature (over-mature) fir and white birch with the occasional yellow birch. I didn't walk the entire stand, but from what I saw patches will only serve to destroy good pole timber without capturing much merchantable volume. Did you ever walk this stand?

Thanks,

Chris Fife

Senior Resource Forester  
Plum Creek Northern Kingdom Unit  
603-237-8657 phone/fax  
802-473-0866 mobile

Build responsibly. Choose wood from well-managed  SFI® forests.

**From:** Dan Kilborn [mailto:Dan@vlt.org]  
**Sent:** Wednesday, January 06, 2010 7:33 PM  
**To:** Chris Fife  
**Subject:** RE: Winter roads

Hey Chris,

24

Yes I think the roads look reasonable, go for it. I will get you a written approval as part of the harvest plan approval. As far as getting out on the job I would like to do that in January as you suggested, but the only two days I have open are the 20th and the 26th. Either of those days work for you? Thanks, dan

---

**From:** Chris Fife [mailto:Chris.Fife@plumcreek.com]  
**Sent:** Wednesday, January 06, 2010 9:56 AM  
**To:** Dan Kilborn  
**Subject:** Winter roads

Hi Dan. I'm wondering where we stand on the winter roads on Clough Brook? With current weather conditions, I'd like to be able to get the dozer back out there to move a few stumps and pack the snow down so the roads can continue to freeze. Is it ok to do this?

Thanks,

Chris Fife

Senior Resource Forester  
Plum Creek - Northern Kingdom Unit  
603-237-8657 phone/fax  
802-473-0866 mobile

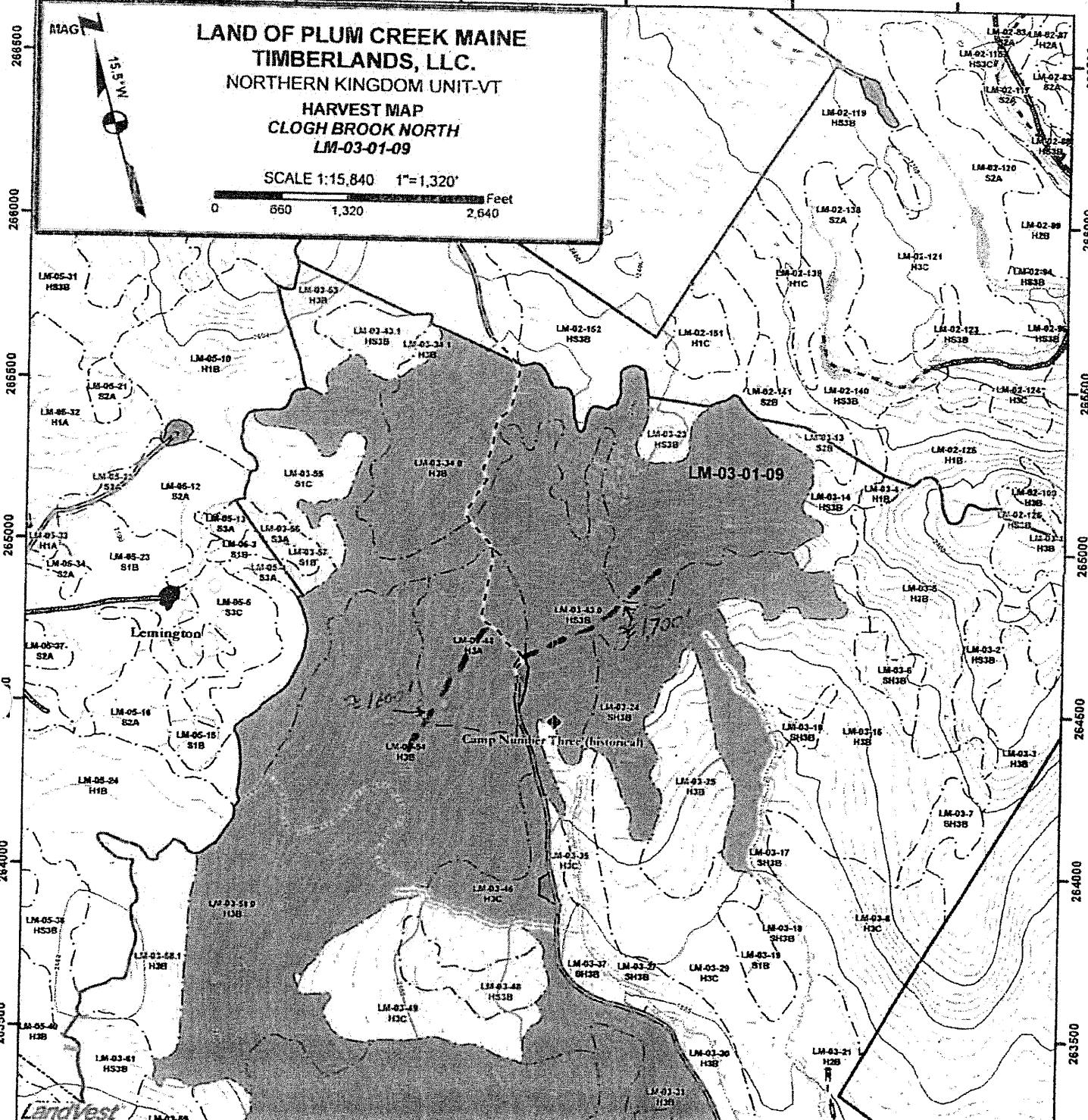
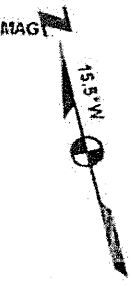
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568000 VT STATE PLANE 568500 569000 569500 570000 570500  
 NAD 83 METERS

**LAND OF PLUM CREEK MAINE  
 TIMBERLANDS, LLC.  
 NORTHERN KINGDOM UNIT-VT  
 HARVEST MAP  
 CLOUGH BROOK NORTH  
 LM-03-01-09**

SCALE 1:15,840 1"=1,320'  
 0 660 1,320 2,640 Feet



Town: LEMINGTON  
 County: ESSEX  
 Compartment: LM-03  
 Forester: JCH  
 Job Number: LM-03-01-09  
 Contractor: TBD

STAND NUMB	STRATA	OS TYPE	SILV PRES	ACRES
LM-03-24	SH34B/SH2B	SH3B	ITH	68.8
LM-03-34.0	H3B	H3B	2SS	137.0
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LM-03-44	H3B	H3A	ITH	37.0
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LM-03-54	H3B	H3B	STC	97.4
<b>TOTAL (Acres derived from GIS)</b>				<b>471.1</b>

- PROPOSED HARVEST
- ACTIVE HARVEST
- COMPLETE HARVEST
- APPROVED HARVEST
- POSTPONED HARVEST
- FLOWSHED/BORG
- GRAVEL PIT
- LAKE/BOG
- OPEN/AGRICULTURAL
- RIPARIAN ZONE
- SPECIAL TREATMENT AREA
- WATER
- COUNTY LINE
- TOWN LINE
- STREAM
- STAND LINE
- COMPARTMENT LINE
- 30 FT CONTOUR
- 100 FT CONTOUR
- 200 FT CONTOUR
- GALIE
- CAMP
- PAVED PUBLIC ROAD
- GRAVEL PUBLIC ROAD
- YEAR ROUND GRAVEL
- SUMMER ROAD (UNGRAVELLED GRAVEL)
- IMPROVED WATER ROAD
- UNIMPROVED WATER ROAD
- DRID TRAIL/UNMAINTAINED ROADWAY
- UNGRAVELLED ROAD SURFACE
- CUTTING EDGE

Map Document: (D:\map\_projects\VT\clients\PLUM\_CREEK\_7086\HARVEST\_UNITS\LM-03-01-09\_CLOUGH\_BROOK\_NORTH.mxd)  
 10/21/09 - 11:27:20 AM

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# Vermont Land Trust

CONSERVING LAND FOR THE FUTURE OF VERMONT

25

January 15, 2010

Chris Fife  
Plum Creek Timber Company  
P.O. Box 260  
Colebrook, NH 03576

8 Bailey Avenue  
Montpelier, VT 05602  
(802) 223-5234  
(802) 223-4223 fax  
www.vlt.org

RE: THP Approvals: **Clay Hill Brook East (BR-02-01-09)**  
**Willard Stream (LM-01-02-09)**  
**Upper Clough Brook North (LM-03-01-09)**  
**Upper Clough Brook South (LM-03-02-09)**

## REGIONAL OFFICES

Central Vermont  
8 Bailey Avenue  
Montpelier, VT 05602  
(802) 223-5234

Champlain Valley  
P.O. Box 850  
Richmond, VT 05477  
(802) 434-3079

Northeast Kingdom  
P.O. Box 427  
St. Johnsbury, VT 05819  
(802) 748-6089

Southeast Vermont  
and Mountain Valley  
54 Linden Street  
Brattleboro, VT 05301  
(802) 251-6008

Southwest Vermont  
and Mettowee Valley  
10 Furnace Grove Road  
Bennington, VT 05201  
(802) 442-4915

Dear Chris,

Please consider this letter your official approval for the following sales:

**Clay Hill Brook East (BR-02-01-09):** Approved.

**Willard Stream (LM-01-02-09):** Approved.

**Upper Clough Brook North (LM-03-01-09):** Approved. I would like to note the high level of browsing pressure by moose that we observed while visiting the sale area, particularly in the upper elevations in the eastern portion of the block. The harvest plan did not record the browse pressure, but it was a significant part of our conversation in the woods as we discussed the sale area.

Also approved as an addendum to the harvest plan is the construction of two winter roads to facilitate the sale. Your letter of request and map dated 12/23/09 indicate that two roads (one being approximately 1600' and the other 1700' in length) requiring minimal excavation will be constructed to shorten skidding distances. You also indicate that all AMPs will be employed during the construction and close out of the roads.

**Upper Clough Brook South (LM-03-02-09):** Approved. This area was also severely impacted by moose browse, especially in the upper elevations found in the eastern portion of the block. The OSR approved for Stand 50 to release a beech understory was one result of our discussions. When combined with surrounding treatments, an attempt to eliminate the beech regeneration from this stand and encourage the establishment of other hardwood species would have resulted in a large area (between 300 and 400 acres) in a state of regeneration susceptible to future browse impacts. While it may not be desirable to encourage established beech regeneration across the entire ownership, it was agreed that given the possibility of regeneration failure due to moose browse, promoting the established beech understory was a reasonable option in this circumstance.

This harvest plan also indicates that Stand 58 will receive a clear cut, although a subsequent email between you and Matt Langlais noted that a more appropriate prescription to describe the cutting here would be salvage. Regardless, my understanding is that given the extremely



# Vermont Land Trust

CONSERVING LAND FOR THE FUTURE OF VERMONT

Page 2

8 Bailey Avenue  
Montpelier, VT 05602  
(802) 223-5234  
(802) 223-4223 fax  
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## REGIONAL OFFICES

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Brattleboro, VT 05301  
(802) 251-6008

Southwest Vermont  
and Mettowee Valley  
10 Furnace Grove Road  
Bennington, VT 05201  
(802) 442-4915

low value and low stocking for the stand, the only economically viable treatment is to cut all trees within the merchantable portions of the stand. It is also my understanding that large yellow birch trees and red spruce will be left for seed where available and that pockets of acceptable regeneration will be avoided during the harvest. Given the extreme level of mortality within the stand I find the treatment to be reasonable. This stand serves as a severe example of decline, yet I find it important that the prescription still addresses the future regeneration of the area. If we encounter similar stands in the future this consideration will be essential given that the principle objective of the working forest easement is to establish and maintain productive forestry resources.

I am pleased that our discussions in the woods enabled us to modify specific prescriptions within stands to address browse impacts across stand lines. As you well know, assessing impacts at the landscape level is essential for the long term sustainable management of large ownerships.

As always, if you have any questions please don't hesitate to contact me.

Sincerely,

Daniel Kilborn  
Stewardship Forester

cc: Matt Langlais, Essex County Forester  
LandVest

## Langlais, Matt

---

**From:** Chris Fife [Chris.Fife@plumcreek.com]  
**Sent:** Tuesday, January 26, 2010 8:38 PM  
**To:** Dan Kilborn; Langlais, Matt; Greenwood, Richard; 'Billy Coster'  
**Cc:** Lemire, Kevin  
**Subject:** Plum Creek site visits


Thank you to each of you for your time and input today in the field. The interaction around our implementation of silvicultural prescriptions, AMP's, layout, and operations is very helpful for me as we move forward with management of this land base. I was glad that you were able to meet Kevin and hear his thoughts on the operations.

If you're like me, even though we saw a lot of good things today, the final stop on Welog's mechanical job will be what's consuming most of your thoughts. Please understand that Plum Creek takes our obligations seriously whether to UVA and the state of Vermont, the Conservation Easement, or the implementation of AMP's to protect water quality. These commitments drive how we do business each day as well as who we partner with to manage our land. Harvesting in brook buffers and cutting trees contrary to the silvicultural prescription for the block will not be tolerated. I met with Malcom Washburn this evening to explain the problems we found and we are meeting on the job first thing tomorrow morning.

Thanks for your cooperation in working through these issues. I'll keep you updated on our progress.

Chris Fife

Senior Resource Forester  
Plum Creek - Northern Kingdom Unit  
803-237-8657 phone/fax  
2-473-0866 mobile

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**Langlais, Matt**

---


**From:** Chris Fife [Chris.Fife@plumcreek.com]  
**Sent:** Wednesday, January 27, 2010 6:39 PM  
**To:** Langlais, Matt  
**Subject:** Inspection Follow up  
**Attachments:** LM-03-01-09 InspectionResponse CF.docx

Matt,

I've attached a letter regarding yesterday's inspection. A hard copy is in the mail.

Chris Fife

Senior Resource Forester  
Plum Creek - Northern Kingdom Unit  
603-237-8657 phone/fax  
802-473-0866 mobile

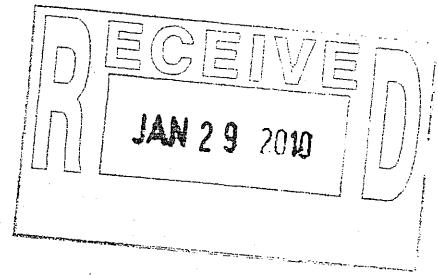
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## Plum Creek

*Growing Value from Exceptional Resources*



*Northern Kingdom Unit P.O. Box 260, Colebrook, NH 03576 (603)-237-8657*

January 27, 2010

Matt Langlais  
Essex/Caledonia County Forester  
State of Vermont  
Dept. of Forests, Parks & Recreation  
1229 Portland St, Suite 201  
St. Johnsbury, VT 05819-2099

Matt:

Thank you for your time inspecting active Plum Creek harvest operations in Lemington yesterday. While overall we saw responsible management being implemented on the jobs, I want to follow up on the areas of concern that were identified at the end of the day on LM-03-01-09, Clough Brook North.

To recap, in stand 34 the harvest prescription calls for a two stage shelterwood with a residual BA of 30 – 40 sq. ft. The area was painted to leave, but the residual BA did not appear to come close to meeting 30 sq. ft. for the portion of the stand we were in. The LandVest forester felt that the residual we were seeing didn't make sense with how the area was painted so we inspected the piles on the landing and found marked trees. The area in question is approximately 27 acres of a 137 acre stand and appeared to vary from a residual BA of 0 to just below 30 sq. ft. Second, on the same block, we identified a stream that had excessive levels of harvesting throughout the AMP buffer. In one place near the head of the stream the skid trail was within approximately 10 feet of the channel of the stream. The centerline of the stream was flagged in blue. It was noted that the buffer strip was painted as if it was part of the surrounding stand, marking out leave trees and wildlife trees. Concern was also expressed over the number of crossings of this stream (3) and the stream behind the landing (2).

As an immediate response to these problems I had a preliminary meeting with Malcom Washburn, the owner of Welog, last night and then walked the job with him this morning. An excavator will be used to fix the skid trail that was too close to the stream and to establish a slight burm to prevent any potential of the stream jumping the channel. All stream crossings will be removed and stabilized and any skid trails leading to the stream will have waterbars installed. The excavator will also fix the crossing on the far eastern corner of stand 34. In addition we will cruise stand 34 immediately to determine the overall residual BA.

There are a few changes that I had made prior to this inspection but after this stand was laid out that will help avoid future problems of this type.

- All stream buffers are now flagged 50' out on both sides of the stream and any trees to be cut within the buffer are marked.
- Plum Creek has provided all woods foremen for our VT harvesting contractors GPS units with harvest boundaries, including blue line streams, loaded.
- Contractors will only cross streams at designated locations.
- One LandVest forester will be responsible for Plum Creek.

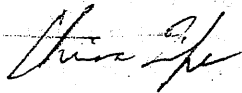
In addition, in response to the issues identified yesterday we are doing the following:

- As mentioned above, immediately cruise stand 34 to determine the overall residual BA.
- Review AMP's related to stream buffers and crossings with all logging contractors in VT this week.
- Distribute additional GPS units so that each harvester has one.
- Renew the practice of stump marking leave trees.
- The LandVest forester who painted within the stream buffer will no longer do unsupervised layout on Plum Creek. (If he marks on Plum Creek it will be with another LandVest forester and under their direct supervision.)

It is worth stating that Plum Creek has higher expectations than this for all of our logging contractors and we are disappointed with this new contractor's performance on this portion of the harvest block. I am actively working to resolve these issues.

Despite the issues that were identified yesterday on LM-03-01-09, I hope you will recognize the pattern of good practices employed on Plum Creek over the past year in Vermont and our desire to constantly improve. We/I value your input as a forester and partner in management and continue to strive to be responsive to your requests.

Sincerely,



Chris Fife

Senior Resource Forester  
Plum Creek-Northern Kingdom Unit

Cc: Tim Dorrell, Senior Resource Manager  
Billy Costner, Director of Conservation, VHCB  
Dan Kilborn, Stewardship Forester, VLT  
Richard Greenwood, State Lands Forester, VT FP&R

State of Vermont  
Department of Forests, Parks and Recreation  
1229 Portland Street, Suite 201  
St. Johnsbury, VT 05819-2099  
www.vtfpr.org

[phone] 802-751-0110  
[fax] 802-748-6687  
[tdd] 800-253-0191

Agency of Natural Resources

29

Chris Fife, Senior Resource Forester  
Plum Creek-Northern Kingdom Unit  
PO Box 260  
Colebrook, NH 03576

February 18, 2010

Dear Chris:

On January 26, 2010, Agency of Natural Resources foresters Richard Greenwood and Agency of Natural Resources Caledonia/Essex county forester, Matthew Langlais, made a site inspection of a property owned by Plum Creek, which is currently being harvested by Plum Creek, located off the Simms Hill Road system along the upper drainage of Clough Brook in the town of Lemington, Vermont. The subcontractor is Malcolm Washburn and his company WE-LOG of North Stratford, NH. During this visit, Matthew and Richard observed violations of the water quality laws of the State of Vermont, a failure to implement the Amps (Acceptable Management Practices) and ongoing and past discharges of sediment into the waters of the state, coming off of the property which you are currently logging. The violations they observed were discharges from an area located just above one of the upper landings where harvesting equipment had cut and operated in a stream buffer, and discharges off the landing. In addition a skidder had driven through the brook in at least one place higher up, which also constitutes a discharge. They also had some concerns with the number of crossings in the brook and whether or not proper closeout would occur.

On February 9, 2010 Matt. Reginald Smith (ANR Environmental Enforcement Officer), and I met with you on site. There was too much snow to observe the underlying soil and water conditions. We did observe that some remedial work had been done in the buffer area where the violation occurred and near the landing. We were also able to observe that you had taken out 2 of the crossings on the brook, but that there were areas of disturbed soil and no water bars in place. In addition, we looked at the area up top where a skidder had driven through the brook.

**We agreed during this visit to return with you in the spring before the major runoff occurs to look the site over and agree on further remedial work. Please Contact us as soon as this is feasible.**

The specific AMP violations are as follows:

**Sediment/Slash in Brook.**

*Amp# 7 Silt fencing, hay bale erosion checks or water diversions shall be used to prevent sediment from skid trails from entering streams and other surface waters.*

*Amp#8 Streams and all bodies of water shall be kept free of slash and logging debris.*

*Amp#10 Logging activities except for the necessary and proper construction of stream crossing structures, shall be kept out of stream channels.*



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State of Vermont  
Department of Forests, Parks and Recreation  
1229 Portland Street, Suite 201  
St. Johnsbury, VT 05819-2099  
[www.vtfpr.org](http://www.vtfpr.org)

[phone] 802-751-0110  
[fax] 802-748-6687  
[tdd] 800-253-0191

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*Amp#12 Areas of exposed soil within 25 feet of streams must be seeded and mulched*  
*Amp#14 Except for necessary construction of stream crossings, a protective strip shall be left along streams and other bodies of water in which only light thinning or selection harvesting can occur so that breaks in the canopy are minimal and a continuous cover is maintained. Log transport machinery must remain outside a 25 foot margin along the stream or water body. Including this 25 foot margin the width of the protective strip shall be according to table 4 in the Amp book which in this case for slope of 0-10 percent shall be 50 feet.*

**AMP to be applied at closeout are as follows**

*Amp#20 Waterbars shall be applied at proper intervals according to table 1 in the orange book*

*Amp#21 All non permanent structures shall be removed from streams and the channel restored.*

*Amp#22 Following the close of an operation, all approaches to streams, between the stream and the first water diversion on either side, and all disturbed stream banks shall be stabilized, seeded and mulched.*

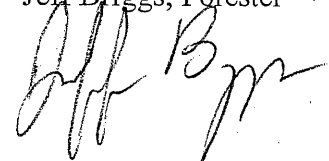
*Amp#23 Log landings shall be graded and water diversions installed as needed to prevent sedimentation.*

*Amp#24 Areas of exposed soil within the protective strip along waterways shall be stabilized by seeding and mulching.*

We have referred this case to Reginald Smith, Environmental Enforcement Officer. (802- 766-8860), who will be working with all parties involved to ensure compliance with the State of Vermont's water quality laws. As in all of our AMP cases, our intentions are to enforce the law and to have you remediate the violations and rehabilitate the site in a timely manner. However, a major goal in this process is to educate you and your operators so that you will implement proper practices in the future. Please call me if you have any questions about this letter. Thank you for your cooperation concerning this matter.

cc. Reginald Smith, EEO 802-751-0119

Sincerely,  
Jeff Briggs, Forester



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Chris Fife, Senior Resource Forester  
Plum Creek-Northern Kingdom Unit  
PO Box 260  
Colebrook, NH 03576

April 27, 2010

Dear Chris:

On **April 19, 2010**, Agency of Natural Resources forester Gary Sabourin, Agency of Natural Resources Environmental Enforcement Officer Reginald Smith, and myself, along with Plum Creek representatives Mark Doty and you, made a site inspection of a property owned by Plum Creek, which has recently been harvested by Plum Creek, located off the Simms Hill Road system along the upper drainage of Clough Brook in the town of Lemington, Vermont. The subcontractor was Malcolm Washburn and his company WE-LOG of North Stratford, NH.

During prior visits, January 26, 2010 and February 9, 2010, ANR foresters had observed violations of the water quality laws of the State of Vermont, a failure to implement the AMPs (Acceptable Management Practices) and ongoing and past discharges of sediment into the waters of the state, coming off of the logged area. The violations they observed were discharges resulting from harvesting equipment cutting and operating in a stream buffer, discharges off the landing, and discharges from a skidder crossing a stream with no proper crossing structure in place. In addition there were several places where harvesting equipment had gone into ephemeral wetlands, and seeps near the headwaters of brooks. There were also a number of stream crossings that had been removed that needed to be properly closed out with waterbars installed and disturbed areas of soil seeded and mulched. Details on the AMP violations and remedial measures to be applied were discussed at the February 9<sup>th</sup> site visit and outlined in a letter dated February 18<sup>th</sup>, 2010.

On April 19, 2010, we found that you had hired a contractor, Alan Poirier, to perform the remedial work. We looked at all of the sites that we had identified and several others that had subsequently been located by ANR forester Matt Langlais. **This letter is to inform you that on April 19, 2010, I observed that all of the major remedial actions relating to the AMP violations have been accomplished and that you are now in compliance with the AMP's.** During our visit we identified several more waterbars, some seeding and mulching on waterbars on the main skid/truck road, and one crossing below the main landing that needs to be pulled and seeded and mulched. There were several ephemeral areas that we agreed would be best to stay out of. We also agreed that it would be best to leave in place the stream coming through the area that you had cut in the buffer near the landing (the first thing we looked at) rather than try to reroute it. Alan's work was very good and since he accompanied us on the entire site visit, we have every confidence that he will accomplish the remaining remedial work.

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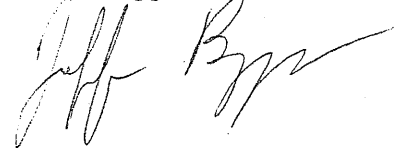
Gary and I believe that we had a productive conversation with you and we thank you for your work and attention to this matter. **To reiterate the main points:**

1. **The need for pre harvest Water quality/AMP planning that specifically involves the crew on the ground that is doing the work. We understand that you and Gary will be working to put together a logger training session focusing on this subject.**
2. **The need for better oversight by Plum Creek. We understand that Plum Creek is hiring another forester to oversee operations in Vermont which should help.**
3. **Our concern that at the scale of harvesting that Plum Creek operates at and with the harvesting plans it has for the future in Vermont, that a higher level of AMP/water quality compliance be adhered to going forward.**
4. **Our shared commitment to work together.**

As in all of our AMP cases, our intentions are to enforce the law and to have you remediate the violations and rehabilitate the site in a timely manner. Please call me if you have any questions about this letter. Thank you for your cooperation concerning this matter.

cc. Reginald Smith, EEO 802-751-0119  
Gary Sabourin  
Matt Langlais

Sincerely,  
Jeff Briggs, Forester



## Langlais, Matt

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**From:** Chris Fife [Chris.Fife@plumcreek.com]  
**Content:** Monday, May 17, 2010 9:07 AM  
**To:** Briggs, Jeff; Langlais, Matt; Sabourin, Gary; Smith, Reg; Dan Kilborn  
**Cc:** Tim Dorrell  
**Subject:** Clough Brook North AMP close out

The AMP close out work is now complete on the Clough Brook North job in Lemington. The AMP contractor, Alan Poirier, finished up and moved out last week. The additional waterbars and seeding and mulching that we identified on April 19<sup>th</sup> were taken care of as were some additional areas of rutting and 2 stream crossings identified on April 22<sup>nd</sup> when Dan Kilborn and I walked the entire sale area. I will continue to monitor the area as the summer progresses to make sure that the installations are functioning and that no additional work is needed.

Thank you all for your time and input in closing out this site correctly. I wish the circumstances could have been different, but working together on this has laid a strong foundation for AMP compliance on all of our jobs moving forward.

Chris Fife

Senior Resource Forester  
Plum Creek - Northern Kingdom Unit  
603-237-8657 phone/fax  
802-473-0866 mobile

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