DATA STRATIFIED BY FOREST OWNERSHIP

Taken from MFS 2006 midcycle report - FIA plots remeasured 2004,05,06

Although the net growth data separated "NGOs/Tribal" from "Family Forests", the volume data did not. Therefore, they are lumped together as "NIPF", non-industrial private forest.

Ownership Group	1000s Acres	Cords per acre SW	HW	Totals	Cords/acre/year Gross grw*	Net grw**
Public	**863.32**	**11.03**	**9.44**	**20.47**	**0.636**	**0.432**
Industry	3,086.40	9.04	6.09	15.13	0.520	0.330
Corp. invenstor	7,169.51	8.46	5.93	14.39	0.515	0.342
NIPF	6,224.45	9.85	9.07	18.92	0.616	0.401
Totals	17,343.68	9.19	7.26	16.45	0.558	0.365

* Gross growth equals accretion on trees 5"+ plus ingrowth, those trees newly reaching 5" dbh.

**Net growth equals gross growth minus mortality, and adjusted for any increase/decrease in cull volume.

	SW	HW	Totals
DPPL 2011	13.13	9.93	23.06
DPPL 1999	11.25	9.74	20.99
Est. DPPL 2005 (midpoint of 3 FIA yr)	**12.19**	**9.84**	**22.03**

Reference 1

10-22-12

Future Harvesting levels on Public Land's 393,837 acres designated for timber harvests

This document deals with two subjects: past current and future harvest levels off Public Lands and a marketing strategy for future harvested volumes.

The information used to formulate the recommendations was based on public lands data and current information sourced from about 3.5 million acres of private ownerships having similar forest characteristics with Public Lands. The selected private ownerships were principally family ownerships. All ownerships were third party certified using either or both SFI and FSC programs and universally held in high esteem by the public and State as exceptional stewards. A great deal of difference was found between statistics and marketing strategies for private lands versus public lands – greater than anticipated. The forest industry held about 40% less inventory per acre while their harvests exceeded public lands by 50% (only used 2010 and 2011 public lands harvest records which inflated their harvest records versus their ten year average which private lands exceeded by 97%).

Figure 1 shows the harvests from Public Lands for the last 10 years. While harvests levels have increased the land base is still very significantly under utilized. Public Lands discounts their net growth (gross growth less mortality) by 25%; a factor unheard of in private industry and perceived as unnecessarily cautious. This discount and a modest harvest level has been responsible for Public Lands building their inventory to 22.9 cords/acre, 6.5 cords/acre above the private lands inventory and Public Lands inventory is still building.

Recommendations: increase annual harvest rates on Public Lands to their net growth level plus reduce their overall volume /acre down to 20cords within the next fifteen years. This approach translates to (151,590 cords net growth plus 76,142 cords accumulated growth) a 227,732 cords/year harvest level. Achieving a level of 20 cords/acre will still be 20% higher than the industry average of 16.5 cords found on responsible forestland stewards.

There are consequences if Public Lands does not harvest more:

1. Eventually increased volumes per acre will lead to increased mortality,

Reference 2

2. High volumes/ acre translates to increased risk from an inevitable spruce budworm epidemic and insects and diseases spreading up from the south,
3. It is a questionable asset strategy and policy, in times of scarce resources, to hold public money hostage and
4. Ecological, aesthetic and wildlife values can be appreciably accommodated at 20 cords/acre

By shifting emphasis on certain procedures, The cost/cord should be significantly reduced with this increased level of harvest

B. Marketing strategy of forest products off Public Lands

The proposed strategy will benefit the state regardless of volumes harvested.

It is a proven business strategy that better mill prices are received for wood offered in greater quantities and at specified times. Mills are willing to pay a premium for larger quantities timely delivered because it reduces their risk of low inventories and drops the cost of procuring wood from less reliable sources.

Public Land's has not taken advantage of this concept but has allowed other harvesting entities to use Public Land's wood to leverage prices. Most Public Lands wood is sold in the form of "stumpage" which is cut and marketed to mills by various harvesting entities (sappi, Prentice and Carlisle, Huber Corporation, Seven Islands and others).

Public lands should take control of their harvested wood through the use of service contracts. In this system, public lands would pay the harvest entity for their work and market the harvested material.

Other important pieces to the suggested marketing strategy would be to have other Maine Departments, like DIF&W, that own timberlands, to lump their harvested volumes in with Public Lands.

Very key to this strategy is to have the harvested volumes marketed by a woods broker that controls the marketing of huge volumes. Public Lands shouldn't market there own wood because they can't access other wood volumes for leverage and timely deliver as well as a broker can. I question if this skill set currently exists within Public Lands and question the ability to train others... For clarity, a broker could be one of the major landowners or land management firms or someone that principally just markets wood. I would favor a traditional Broker to eliminate conflicts over prioritizing which wood to market most favorably.

Public lands would have several gains from this type of arrangement including:

1. Receiving more value for Public Lands wood,

2. Wood harvesting companies could compete on a level playing field as profits from leveraged volumes couldn't be used to up bid prices,
3. Marketing skills wouldn't need to be developed by Public Lands

This type of strategy would work over a wide range of volumes harvested by Public Lands. Contrary to some thinking, additional wood isn't necessarily being added to the market; in times of static or falling markets, public lands wood would be used by mills to replace less reliable volumes and in times of expanding markets, mills would place more value on this system.

II 4.

Note: This is the version given to auditors in Nov. 2012.

Sustainable Harvest Levels
2012 modeling
Raw FVS yield curves modified, based on:

85% of net growth, somewhat more spruce and fir, TH closer to net growth.

MFS landowner breakout of FIA data ("Public ownership: 0.434 cd/ac/yr)
Apparent net growth on DPPL 1999 thru 2011 (0.453 cd/ac/yr)
2006 model [for intraspecies proportions] - (net growth 68% SW, 32% HW)

EAST	Acres	25,083
E1	2012 cd/ac	26.63
	obj. cd/ac	25
Spp Group	Tot Grw	SHL target
Spruce	2,817	2,200
Fir	1,198	1,200
Cedar	290	200
Hem/OS	1,141	400
Pine	1,399	200
All SW	6,845	4,200
Intol HW	857	1,100
Tol HW	2,859	3,200
All HW	3,716	4,300
Total	10,561	8,500
Cd/ac/yr	0.421	0.339

EAST	Acres	22,262
E2	2012 cd/ac	24.8
	obj. cd/ac	24
Spp Group	Tot Grw	SHL target
Spruce	2,398	2,000
Fir	1,274	1,500
Cedar	310	100
Hem/OS	1,352	600
Pine	1,534	200
All SW	6,868	4,400
Intol HW	816	1,000
Tol HW	2,277	3,300
All HW	3,093	4,300
Total	9,961	8,700
Cd/ac/yr	0.447	0.391

EAST	Acres	29,122
E3	2012 cd/ac	24.4
	obj. cd/ac	24
Spp Group	Tot Grw	SHL target
Spruce	3,303	3,100
Fir	1,448	1,700
Cedar	395	100
Hem/OS	1,926	1,200
Pine	2,910	1,200
All SW	9,982	7,300
Intol HW	954	1,100
Tol HW	2,216	3,200
All HW	3,170	4,300
Total	13,152	11,600
Cd/ac/yr	0.452	0.398

EAST	Acres	22,604
E4	2012 cd/ac	19.87
	obj. cd/ac	22
Spp Group	Tot Grw	SHL target
Spruce	2,669	2,100
Fir	1,329	1,800
Cedar	356	100
Hem/OS	1,395	800
Pine	1,654	300
All SW	7,403	5,100
Intol HW	616	700
Tol HW	1,825	2,500
All HW	2,441	3,200
Total	9,844	8,300
Cd/ac/yr	0.435	0.367

EAST	Acres	99,071
E1-E4	2012 cd/ac	24.03
	obj. cd/ac	23.80
Spp Group	Tot Grw	SHL target
Spruce	11,187	9,400
Fir	5,249	6,200
Cedar	1,351	500
Hem/OS	5,814	3,000
Pine	7,497	1,900
All SW	31,098	21,000
Intol HW	3,243	3,900
Tol HW	9,177	12,200
All HW	12,420	16,100
Total	43,518	37,100

NORTH	Acres	41,251
N1	2012 cd	22.49
	obj. cd/a	23
Spp Group	Tot Grw	SHL target
Spruce	5,014	3,800
Fir	3,795	4,400
Cedar	673	1,300
Hem/OS	521	50
Pine	462	50
All SW	10,465	9,600
Intol HW	2,369	800
Tol HW	4,523	4,900
All HW	6,892	5,700
Total	17,357	15,300
Cd/ac/yr	0.421	0.371

NORTH	Acres	31,241
N2	2012 cd	21.45
	obj. cd/a	23
Spp Group	Tot Grw	SHL target
Spruce	3,650	2,400
Fir	3,086	3,300
Cedar	478	550
Hem/OS	513	200
Pine	359	50
All SW	8,066	6,500
Intol HW	1,417	900
Tol HW	3,543	3,600
All HW	4,960	4,500
Total	13,026	11,000
Cd/ac/yr	0.417	0.352

NORTH	Acres	28,209
N3	2012 cd	20.7
	obj. cd/a	22
Spp Group	Tot Grw	SHL target
Spruce	3,524	3,400
Fir	2,520	2,000
Cedar	538	400
Hem/OS	448	200
Pine	398	100
All SW	7,428	6,100
Intol HW	1,346	600
Tol HW	2,580	2,700
All HW	3,926	3,300
Total	11,354	9,400
Cd/ac/yr	0.402	0.333

NORTH	Acres	30,744
N4	2012 cd	23.16
	obj. cd/a	23
Spp Group	Tot Grw	SHL target
Spruce	3,612	2,800
Fir	2,684	2,800
Cedar	443	300
Hem/OS	705	400
Pine	349	100
All SW	7,793	6,400
Intol HW	1,072	700
Tol HW	3,312	3,600
All HW	4,384	4,300
Total	12,177	10,700
Cd/ac/yr	0.396	0.348

NORTH	Acres	131,445
N1-N4	2012 cd	22.02
	obj. cd/a	22.79
Spp Grou	Tot Grw	SHL target
Spruce	15,800	12,400
Fir	12,065	12,500
Cedar	2,132	2,550
Hem/OS	2,187	850
Pine	1,568	300
All SW	33,752	28,600
Intol HW	6,204	3,000
Tol HW	13,958	14,800
All HW	20,162	17,800
Total	53,914	46,400

WEST	Acres	46,444
W1	2012 cd/ac	21.82
	obj. cd/ac	23
Spp Group	Tot Grw	SHL target
Spruce	5,250	3,400
Fir	2,421	2,400
Cedar	273	0
Hem/OS	468	200
Pine	1,457	200
All SW	9,869	6,200
Intol HW	1,925	900
Tol HW	7,655	8,400
All HW	9,580	9,300
Total	19,449	15,500
Cd/ac/yr	0.419	0.334

WEST	Acres	31,258
W2	2012 cd/ac	27.44
	obj. cd/ac	27
Spp Group	Tot Grw	SHL target
Spruce	3,558	2,800
Fir	1,409	1,900
Cedar	185	100
Hem/OS	491	300
Pine	906	100
All SW	6,549	5,200
Intol HW	1,313	1,200
Tol HW	4,917	5,700
All HW	6,230	6,900
Total	12,779	12,100
Cd/ac/yr	0.409	0.387

WEST	Acres	22,323
W3	2012 cd/ac	25.24
	obj. cd/ac	24
Spp Group	Tot Grw	SHL target
Spruce	2,983	2,200
Fir	1,135	1,600
Cedar	133	50
Hem/OS	240	200
Pine	1,011	150
All SW	5,502	4,200
Intol HW	879	600
Tol HW	2,787	3,200
All HW	3,666	3,800
Total	9,168	8,000
Cd/ac/yr	0.411	0.358

WEST	Acres	20,750
W4	2012 cd/ac	23.27
	obj. cd/ac	24
Spp Group	Tot Grw	SHL target
Spruce	2,268	1,800
Fir	1,275	1,400
Cedar	115	50
Hem/OS	266	150
Pine	854	50
All SW	4,778	3,450
Intol HW	913	750
Tol HW	3,201	3,800
All HW	4,114	4,350
Total	8,892	7,800
Cd/ac/yr	0.429	0.376

WEST	Acres	165,630
W1-W6	2012 cd/ac	23.21
	obj. cd/ac	24.05
Spp Grou	Tot Grw	SHL target
Spruce	17,862	13,200
Fir	9,923	10,450
Cedar	972	400
Hem/OS	1,992	1,250
Pine	7,964	1,100
All SW	38,713	26,400
Intol HW	7,421	5,150
Tol HW	23,675	26,450
All HW	31,096	31,600
Total	69,809	58,000

WEST	Acres	6,566
W5	2012 cd/ac	19.64
	obj. cd/ac	24
Spp Group	Tot Grw	SHL target
Spruce	559	200
Fir	405	150
Cedar	34	0
Hem/OS	139	200
Pine	270	500
All SW	1,407	1,050
Intol HW	361	100
Tol HW	1,113	950
All HW	1,474	1,050
Total	2,881	2,100
Cd/ac/yr	0.439	0.320

WEST	Acres	38,289
W6	2012 cd/ac	20.68
	obj. cd/ac	23
Spp Group	Tot Grw	SHL target
Spruce	3,244	2,800
Fir	3,278	3,000
Cedar	232	200
Hem/OS	388	200
Pine	3,456	100
All SW	10,608	6,300
Intol HW	2,030	1,600
Tol HW	4,002	4,600
All HW	6,032	6,200
Total	16,640	12,500
Cd/ac/yr	0.435	0.326

DPPL	Percents of growth	
3 Regions		
	Yield curve	
Spp Group	Tot Grw	SHL target
Spruce	26.82%	24.73%
Fir	16.29%	20.60%
Cedar	2.66%	2.44%
Hem/OS	5.98%	3.60%
Pine	10.18%	2.39%
All SW	61.92%	53.71%
Intol HW	10.09%	8.52%
Tol HW	27.99%	37.77%
All HW	38.08%	46.29%
Total		
Cd/ac/yr		

DPPL	Acres	396,146
3 Regions	2012 cd/ac	23.02
	obj. cd/ac	23.57
Spp Group	Tot Grw	SHL target
Spruce	44,849	35,000
Fir	27,237	29,150
Cedar	4,455	3,450
Hem/OS	9,993	5,100
Pine	17,029	3,300
All SW	103,563	76,000
Intol HW	16,868	12,050
Tol HW	46,810	53,450
All HW	63,678	65,500
Total	167,241	141,500
Cd/ac/yr	0.422	0.357

Reference 3

Ramping up to the Increased Harvest Level of 180,000 Cords per Year

- Annually the DPPL currently harvests about 12 cords/acre on approximately 10,500 acres of Public Reserved Lands which amounted to a harvest of 128,600 cords last year
- Increasing to 180,000 cords per year by gradually decreasing stocking levels from 23 to 21.5 cords per acre over the next 20 years we will:
    - Ramp up the annual harvest from 128,000 cords to 140,000 cords this year , to 160,000 cords next year then to 180,000 cords for the next 20 years
    - Increase the number of acres harvested annually from 10,500 to 13,500-14,000 acres annually
    - Additionally, increase the number of acres harvested per acre from 12 cords per acre to 13-13.5.
- The overall State average of cords harvested per acre is 15.

Reference 4

Harris, Will

From: McLean, Carlisle
Sent: Thursday, April 11, 2013 4:02 PM
To: Harris, Will; Denico, Doug
Cc: Whitcomb, Walt; Woodcock, Patrick C
Subject: Question

The Governor would like to know the following:

1) How many acres of forest lands do we have under conservation easements?
2) How much other property do we have under conservation easements?
(Re above, he's interested in forest land versus non forest lands. You may not have stat or info in exactly this form, so do the best to address the question based on what you have available.)
3) Explain Open Space taxation structure and Tree Growth taxation structure (basic description of each)
4) Current estimate of amount of fiber/harvest that could be additionally harvested to reach sustainable yield – for both public reserved/nonreserved lands, and parks. (You can depict these separately if that is easier.)
5) Current revenue stream and current amount of fiber associated with harvest on all state lands, and broken down by parks versus other public lands.
6) Rough estimate of revenue stream for the differential increase between current harvest level and full sustainable harvest.

We would like a response to these questions by Wednesday, April 17.

Thank you.
Carlie

Carlisle J.T. McLean
General Counsel/Senior Natural Resources Advisor
Office of the Maine Governor
Direct Dial: (207) 287-3535
Cell: (207) 592-0041
Carlisle.McLean@maine.gov

#1 State House Station
Augusta, ME 04333-0001

Reference 5

April 15, 2013

Draft of Response to Governor's Office Request re: Timber Harvesting on Public Lands

For Carlie's Email Response –

Questions 1 and 2 –

Related to Qi Q2 below:

We hold or enforce as first party 374,175 acres of conservation easements.

Of those, 316,862 are Forest Legacy easements; another 45,014 acres have forestry as an allowed use; and the remainder, 12,300 acres, are primarily for scenic and recreation purposes though they may have some forested land

#4. The current estimate of amount of fiber/harvest that could be additionally harvested to reach sustainable yield on public reserved lands is approximately 13,000 cords. That is going from the 2012 harvest of 128,000 cords to a projected 141,000 cords. The figure of 141,000 cords was determined following the recent public lands forest inventory and accounts for managing the timber sustainably under our multiple use mandate. This Harvest level is set with the objective of maintaining a 23 cord per acre timber stocking and was increased after analyzing the inventory results due to the growth of timber on public lands and balancing that with our multiple use management mandate. The Division's intention is to maintain that stocking level with no increase necessary. This stocking level results in a net growth rate that is higher(at 0.432cords/acre/year) that any other category of forest ownership including industrial, corporate investors, NGO's, family forests, or the statewide average. The nearest to us is family forests netting out at 0.404 cd/ac/yr. This management of growth is in concert with our statutory mandate to conduct exemplary forestry.

If a different stocking level is determined across all of the operable acres then the annual harvest could be increased by calculating approximately 400,000 acres times the number of cords per acre to be reduced divided by the number of years chosen to reach that stocking level.

For Parks, there is currently no commodity timber extraction due to statutory restriction. We have language in the budget bill to remove the restriction and allow some timber harvesting to occur on undeveloped park lands. Our current estimates are that approximately 22,000 acres would be available for harvesting timber across the system. On an annual basis we would harvest approximately 8500 cords off of 700-800 acres.

There are approximately 3600 acres of Non-Reserved Lands and of that 2400 acres is available for operable forest land. These acres are already available for timber harvesting and are being managed according to the same procedures as those on Public Reserved Lands.

Reference 6

#5 The increased revenue stream projected for our increased cut of 13,000 cords is between $400,000 and $500,000 per year. Any increase to the harvest level would result in a corresponding increase in revenue. All funds from timber harvesting goes into either the Public Reserved Lands Management account or the Non-Reserved Lands Management account established in statute in Title 12 §1849 and 1835 respectively.

The revenue stream for harvesting in Parks is predicated on the passage of the budget containing the enabling language. Our estimate is for approximately $275,000 annually that will go into the Maine State Parks Facilities Development Fund.

April 17, 2013

Draft of Response to Governor's Office Request re: Timber Harvesting on Public Lands

For Carlie's Email Response –

Questions 1 and 2 –

Related to Qi Q2 below:

We hold or enforce as first party 374,175 acres of conservation easements.

Of those, 316,862 are Forest Legacy easements; another 45,014 acres have forestry as an allowed use; and the remainder, 12,300 acres, are primarily for scenic and recreation purposes though they may have some forested land

#4. With regards to Public Reserved Lands we have reviewed aspects of our harvest and stocking levels with the Maine Forest Service (MFS) with an eye toward assuring that our harvest levels residual timber stands represent prudent business practices and are appropriate to meet our multiple use mandate. We reviewed the discount rate of our net growth that we had set following our recent forest inventory at 14-15% of our total net growth of 166,000 cords of wood per year. MFS questioned if it was not too high given current risks from both natural mortality **and forecasted invasive insect infestation** ~~n~~. We have determined that a lower discount rate is justified and warranted to account for the risk. We believe that a more appropriate level to account for the risks is 10%. Changing that discount level would increase our current harvest level from 141,000 cords per year to 150,500 cords per year.
We also have reviewed our current stocking level of how much timber per acre we should be carrying. Currently we are carrying a stocking level of 23 cords per acre. MFS had suggested lowering that level to 20 cords per acre based on comparisons with privately owned forests. After discussion with MFS about the implications of various stocking levels and their relationship to certification and our statutory mandate, we have agreed on a stocking rate of 21.5 cords per acre. Over our entire ownership of approximately 400,000 operable acres for timber harvesting, this would amount to an increase of 600,000 cords of wood available for harvest. Getting to this level of stocking will require us to operate on more acres per year as well as harvesting more cords per acre. We have agreed that we can achieve the reduction to 21.5 acres over 20 years with an additional 30,000 cords per year added to our harvest level while also working within our statutory mandate and maintaining our certification. Together with the change in discount rate, this would bring our annual total to 180,500 acres per year. While we approve of moving to these new, higher harvest levels we would also advocate for reviewing them at regular intervals for their impacts on our certification and meeting our statutory mandates for multiple use.

Reference 7

Operationally, to reach these new levels of harvest we need to develop a plan to ramp up to the new level with key components to include: developing a rationale for the increased harvest levels that will satisfy our certifiers to maintain our forest sustainability certification, analyzing and developing staffing requirements appropriate to managing the increased harvests, and developing increased availability of labor and harvesting equipment in the private sector to harvest timber on Public Lands. The MFS is committed to work with the BPL on labor and equipment needs. Some flexibility, per the Commissioners purview of MFS employees is possible. MFS also helps finance contractor equipment needs and has excellent contacts with the wood harvesting force.

There are approximately 3600 acres of Non-Reserved Lands and of that 2400 acres is available for operable forest land. These acres are already available for timber harvesting and are being managed according to the same procedures as those on Public Reserved Lands. We would continue to mirror the harvest levels set for Reserved Lands on our non-reserved lands.

For Parks, there is currently no commodity timber extraction due to statutory restriction. We have language in the budget bill to remove the restriction and allow some timber harvesting to occur on undeveloped park lands. Our current estimates are that approximately 22,000 acres would be available for harvesting timber across the system. On an annual basis we would harvest approximately 8500 cords off of 700-800 acres.

#5 The difference in revenue by harvesting at the 180,500 level over our current harvest for the most recent year (128,600 cords) is estimated to be $2,076,000 per year. In all likelihood it will take up to two years to reach the 180,500 cords per year harvest level. All funds from timber harvesting goes into either the Public Reserved Lands Management account or the Non-Reserved Lands Management account established in statute in Title 12 §1849 and 1835 respectively.

The revenue stream for harvesting in Parks is predicated on the passage of the budget containing the enabling language. Our estimate is for approximately $275,000 annually that will go into the Maine State Parks Facilities Development Fund.

Morrison, Tom

From: Harris, Will
Sent: Wednesday, April 17, 2013 11:17 AM
To: Denico, Doug
Cc: Morrison, Tom
Subject: RE: Response to Carlie's questions
Attachments: April 17FOr CarlieEmail .5.docx

Doug
I went you a little better in the deletion on #4. I deleted everything you had in bold and the words "both natural", so that the sentence now reads: MFS questioned if it was not too high given current risks from mortality.
We are fine with the add-in that you suggested. I have attached the document as we would now like to see it.
Please let me know if you still agree.
Thanks
Will

From: Denico, Doug
Sent: Wednesday, April 17, 2013 9:06 AM
To: Harris, Will
Subject: RE: Response to Carlie's questions

Will I changed very little. In the first paragraph in #4 I suggest a deletion which is in Bold. Lower down, I have added a piece which is underlined (tracking would work this AM) This underlined part just offers up MFS support for the venture. For our signatures, I think we should say they apply to Sections 4&5 as I haven't had discussions with anyone about them. OK?

Doug Denico
Doug Denico, Director
Maine Forest Service
#22 SHS
Augusta, ME 04333
Tel: 207-287-2795
Cell: 207-592-3014
doug.denico@maine.gov

From: Harris, Will
Sent: Wednesday, April 17, 2013 8:18 AM
To: Denico, Doug
Cc: Morrison, Tom; Whitcomb, Walt
Subject: Response to Carlie's questions

Doug ,
Attached is a more complete response to Carlie's questions including what we had agreed on yesterday for Reserved Lands as well as for Non-Reserved Lands and Parks. I have also included our portion of the response on conservation easements.
Let me know if you need more.
Thanks
Will

Reference 8

Willard Harris, Director
Maine Department of Agriculture, Conservation and Forestry
Division of Parks & Public Lands
22 State House Station
Augusta, ME 04330
207-287-4961
www.maine.gov/acf

Areas of Compromise/Conflict Between BPL and MFS Reports

The MFS believes BPL and the MFS both agree that the volume selected to be maintained on a land base strongly influences the annual sustainable harvest level. The actual volume per acre and annual sustainable harvest level covers a range of defensible volumes. Both parties are not in agreement on what factors to favor and if public policy requires a course correction at this time.

BPL has selected an annual harvest of 141,000 cords to match up with their inventory of 23 cords per acre. As to the 141,000 cord annual cut described as sustainable, it is 19,000 cords less than BPL's net growth (total growth less mortality). This difference is much larger than what other conservative landowners use, bringing the MFS to support an increase beyond 141,000 cords. To continue with a 141,000 cords annual harvest will very likely further increase the current 23 cords/acre inventory level.

The annual harvest volume could be further finest from further modeling but deadlines preclude near term analysis. The MFS suggested an annual harvest of 152,000 cords last fall and still recommends such a figure as a valid "sustainable" level. This figure of 152,000 cords leaves a surplus of 8,000 cords of net growth to accommodate unforeseen events.

After reviewing specific landowner's growth and harvest figures, it was apparent to the MFS that third party certified and dual third part certified landowners carried much lower cords per acre than BPL. The difference was greater than justified purely on BPL's public mandates. Consequently, the MFS suggested BPL volumes/acre be lowered from 23 cords per acre to 20 cords/acre over 15 years. Only certified lands were reviewed for this exercise so certification systems had already approved volumes substantially lower than BPL's 23 cords per acre. Additionally, the 20 cords per acre volume recommended by the MFS is higher than the highest volume in the certified ownerships reviewed. Another factor not understood about certification is that it requires landowners to incorporate public interests and values into their management plans similar to what the BPL does by statute.

To accommodate BPL's concerns, reducing the 23 cords per acre to 20 cords per acre could be extended to 20 years, up from 15 years. This would result in a harvest of 152,000 cords of sustainable cut wood plus 60,000 cords per year of built up surplus growth to lower the 23 cods per acre level to 20 cords per acre. The annual harvest would be 212,000 cords per year under the MFS recommendation.

To keep the impact of the increased cut minimal to meet other BPL mandated objectives, the cut could be extended over additional acres annually and decrease the harvest cycle (time between harvests on a given acre). The harvest per acre figure wouldn't have to change appreciably in this scenario keeping visuals and habitat changes at near present levels. This approach would capture some of the high mortality now experienced by BPL as compared to other management systems. More frequent entries would allow stand structure to be more regulated for increased growth (a matter of spacing to capture sun,

nutrient and water more efficiently). In short the increased harvest would be modified by compensating factors.

This approach could be checked on a frequent basis for validation. Forest Consulting firms like James Sewall and other major land owners such as Seven Islands, Huber or Irving could give a quick reality check or more comprehensive analysis if desired. Several years of the MFS approach will not impact BPL lands significantly. A course correction, if needed, can be made at a later time.

The MFS is very concerned about the coming budworm outbreak and new insects that will kill spruce now located just a short ways into Canada. High spruce/fir volumes bring an unacceptable level of risk to a public asset.

The MFS did not evaluate harvest issues for other classes of land than 394,000 acres of public lands. When appropriate, the concept of having a single source wood broker should be discussed.

April 17, 2013

To: Carlisle McLean
From Doug Denico and Will Harris
Subject: Responses to Administration questions requested on 4-11-17

Carlisle,

Will and I put our names as authors of this email and hard copy to signify that we are in agreement on the Public Lands questions.

I received an email from the DIFW stating that they would submit their own responses to your public lands questions.

Thanks

Doug Denico

Will Harris

Reference 10

REPLIES TO QUESTIONS 4,5,&6

April 17, 2013

Draft of Response to Governor's Office Request re: Timber Harvesting on Public Lands

For Carlie's Email Response –

Questions 1 and 2 –

Related to Qi Q2 below:

We hold or enforce as first party 374,175 acres of conservation easements.

Of those, 316,862 are Forest Legacy easements; another 45,014 acres have forestry as an allowed use; and the remainder, 12,300 acres, are primarily for scenic and recreation purposes though they may have some forested land

#4. With regards to Public Reserved Lands we have reviewed aspects of our harvest and stocking levels with the Maine Forest Service (MFS) with an eye toward assuring that our harvest levels residual timber stands represent prudent business practices and are appropriate to meet our multiple use mandate. We reviewed the discount rate of our net growth that we had set following our recent forest inventory at 14-15% of our total net growth of 166,000 cords of wood per year. MFS questioned if it was not too high given current risks from mortality. We have determined that a lower discount rate is justified and warranted to account for the risk. We believe that a more appropriate level to account for the risks is 10%. Changing that discount level would increase our current harvest level from 141,000 cords per year to 150,500 cords per year.

We also have reviewed our current stocking level of how much timber per acre we should be carrying. Currently we are carrying a stocking level of 23 cords per acre. MFS had suggested lowering that level to 20 cords per acre based on comparisons with privately owned forests. After discussion with MFS about the implications of various stocking levels and their relationship to certification and our statutory mandate, we have agreed on a stocking rate of 21.5 cords per acre. Over our entire ownership of approximately 400,000 operable acres for timber harvesting, this would amount to an increase of 600,000 cords of wood available for harvest. Getting to this level of stocking will require us to operate on more acres per year as well as harvesting more cords per acre. We have agreed that we can achieve the reduction to 21.5 cords per acre over 20 years with an additional 30,000 cords per year added to our harvest level while also working within our statutory mandate and maintaining our certification. Together with the change in discount rate, this would bring our annual total to 180,500 cords per year. While we approve of moving to these new, higher harvest levels we would also

advocate for reviewing them at regular intervals for their impacts on our certification and meeting our statutory mandates for multiple use.

Operationally, to reach these new levels of harvest we need to develop a plan to ramp up to the new level with key components to include: developing a rationale for the increased harvest levels that will satisfy our certifiers to maintain our forest sustainability certification, analyzing and developing staffing requirements appropriate to managing the increased harvests, and developing increased availability of labor and harvesting equipment in the private sector to harvest timber on Public Lands. The MFS is committed to work with the BPL on labor and equipment needs. Some flexibility, per the Commissioners purview of MFS employees is possible. MFS also helps finance contractor equipment needs and has excellent contacts with the wood harvesting force.

There are approximately 3600 acres of Non-Reserved Lands and of that 2400 acres is available for operable forest land. These acres are already available for timber harvesting and are being managed according to the same procedures as those on Public Reserved Lands. We would continue to mirror the harvest levels set for Reserved Lands on our non-reserved lands.

For Parks, there is currently no commodity timber extraction due to statutory restriction. We have language in the budget bill to remove the restriction and allow some timber harvesting to occur on undeveloped park lands. Our current estimates are that approximately 22,000 acres would be available for harvesting timber across the system. On an annual basis we would harvest approximately 8500 cords off of 700-800 acres.

#5 The difference in revenue by harvesting at the 180,500 level over our current harvest for the most recent year (128,600 cords) is estimated to be $2,076,000 per year. In all likelihood it will take up to two years to reach the 180,500 cords per year harvest level. All funds from timber harvesting goes into either the Public Reserved Lands Management account or the Non-Reserved Lands Management account established in statute in Title 12 §1849 and 1835 respectively.

The revenue stream for harvesting in Parks is predicated on the passage of the budget containing the enabling language. Our estimate is for approximately $275,000 annually that will go into the Maine State Parks Facilities Development Fund.

Potential Policy Implications of Major Increase in Harvest to Decrease Inventory

Current stocking, from the 2011 inventory, is 23 cords per acre, a total of 9,050,000 cords on a bit under 394,000 regulated acres. An inventory reduction of ten percent is shown, for discussion purposes. This would mean a reduction in inventory of approximately 905,000 cords. Modeling in 2012 has resulted in a draft target for sustainable harvest level of 141,500 cords per year. A ten-year timeframe for inventory reduction would require the average annual harvest to rise to 231,000 cords per year. Reduction in five years would mean 322,500 cords per year.

Before addressing policy issues, one should ask whether current markets would be able to purchase this additional material, and at economically desirable prices. Also, given current State hiring conditions, it is assumed that few if any additional field staff could be added to lay out and supervise the harvest of this timber. This would mandate a lesser level of harvest control, probably resulting in most operations being conducted under area and/or species designation, with individual tree marking limited to critical wildlife habitat such as some deer wintering areas. In recent years, harvests have averaged 10-11 cords per acre. In order to cut the increased volumes shown above, even with less intensity of sale preparation, that figure would probably rise to 15-20 cords per acre, perhaps more.

Policy implications, using the dominant-use allocation hierarchy as presented in the 2000 Integrated Resource Policy (IRP). This essay assumes no changes in allocations:
--Special protection: Except for land allocated as ecological reserves, special protection sites tend to be quite small in area and often on inoperable terrain. Assuming the ecoreserves remain as such, the change in harvest volume should have little or no impact on this allocation.
--Backcountry recreation: Non-mechanized backcountry is a no-harvest allocation, so any effects would be limited to these acres' borders with other allocations. Motorized backcountry permits timber harvest "...designed to enhance vegetative diversity..." Large scale heavy harvests and/or large clearcuts would significantly change the character of these areas, and would probably simplify the forest community, in contrast to current policy.
--Wildlife: "Essential" habitats (generally RTE species) and "Significant" (defined by NRPA and includes DWA and vernal pools, among other habitats) have management controlled by law or regulation. A major increase in harvesting might result in pushing the envelope on significant habitats, but should not directly affect essential habitats. More widespread are "Specialized" habitats, which include wetlands (including forested wetlands), riparian buffers, mast trees, den trees, and snags. The first two, forested wetlands and riparian buffers, probably cover more than a quarter of the regulated landbase. IRP makes reference to the Division's Wildlife Guidelines for specifics. For riparian buffers, those Guidelines are for single tree selection within 75 feet of the waterway, and single tree/small group selection between 75 and 330 feet. A removal of 15% in any one harvest entry is desirable in riparian buffers. Though forested wetlands are not specifically addressed, current practice is usually group selection and extended-removal shelterwood. On both these habitat types, frozen ground harvest is highly recommended. It would be very difficult to harvest the increased overall volume while managing riparian buffers and forested wetlands according to current practice. The riparian guidelines, at least, would require revision to allow such harvests within policy.
--Remote recreation: These are mainly co-located with either riparian buffers or trail corridor visual zones, and policy implications are addressed in those allocations.
--Visual consideration: IRP recognizes two classes within the allocation. Class 1 is foreground views, trailside areas, places with exemplary natural features and considerable recreational use. Given the policy of timber management to maintain the appearance of "an essentially undisturbed forest", these areas could not contribute to the increased harvest without the policy being changed. Class 2 visual covers more distant views such as forest canopies seen from ridgelines. Group selection and moderately heavy shelterwood harvests fit within current policy. Broad areas of 20 cord per acre removals, or sizable clearcuts within lands under this allocation, would likely be unable to conform to the current policy of managing "to avoid any obvious alterations to the landscape" or to "not draw undue attention."
--Developed recreation: Currently, any timber management in these areas are intended to help develop the facilities or to maintain safety. This allocation includes relatively small acreage, and should be little affected by the increased harvest, though surrounding areas visible from such facilities would be affected.
--Timber management: Policy impacts for timber management would be in two related areas. The first is our objective to manage for high value timber products, typically sawlogs and veneer, growing trees to large size on relatively long rotations/tree ages. A very large increase in the harvest would probably require that final tree age/size would be smaller/younger, and would probably mean that the proportion of the resource in sawlog size trees would decrease. The second impact area concerns our reserve/legacy tree policy along with management of late successional forest and old growth component. The much greater removals per acre will increase the challenge of retaining policy-sufficient legacy trees, and probably makes impossible the retention of the current proportion of LS forest, and the maintaining of old growth component at present levels.

Reference 11

Increased Harvests – Raising SHL to 150,000 Cords, Effects on Silviculture and Other Things

2006 Model

This model estimated total net growth at 150,000 cords per year, including a rough estimate for Seboomook. This means the 2007-on SHL of 114,860 cd/yr has been set at 76% of modeled net growth, that reduction based on three things:

1. Not all the net growth is on trees which are economically feasible to harvest, typically due to available volumes being too low to pay for access. Landowners who have subjected their modeled growth to a spatially explicit model such as Stanley have found that normal logistical constraints result in 10-15% of the net growth being economically unavailable.
2. The modeled growth for the West Region was 1/3 higher than for East or North. This was felt to be too large a difference and so a conservative approach was taken. In hindsight, this may have been overly conservative, as the modeled West growth might have been valid and the East and North lower than the actual growth in the woods.
3. The Bureau's long rotations to produce high value products can be expected to result in greater mortality than that seen on lands where final harvest is at age 60 or less.

Assuming the 2006 modeled growth to still be valid would mean that an SHL of 150,000 cords per acre would essentially equal total net growth, and would initially seem to be sustainable. However, the spatial modeling shows that logistical constraints would make that final 10-15% (15,000-22,000 cords) very expensive to harvest, probably resulting in little to no net revenue.

2012 Revision to the Model

At present the Bureau is having the model reworked by the same party which developed the 2006 version, this revision including the Bureau's 2011 inventory data for the new yield curves. At this time it is too early to make firm statements on how this might affect BPL's SHL, though Public sector net growth parsed from FIA data by Ken Laustsen suggests that the net growth at that time (1999-2003) was a bit higher than that used for the 2006 SHL. If that is the case, it might be sufficient to allow the Bureau to harvesting 150,000 cd/yr without chasing that economically unattractive 10-15% of growth.

Possible Silvicultural Effects (and effect on certification)

Silviculture: This depends on where the new model estimates net growth. Any change from the 2006 growth estimates would make corresponding changes in this discussion. Assuming it's similar to Model 2006, an annual harvest of 150,000 cd/yr while maintaining current revenues per cord would require a small amount of cherrypicking, or more precisely, cutting the economically feasible sites at 10-15% above their net growth while still avoiding the low-volume/costly access sites where net revenue would be small or even negative. This would result in a slow decrease in standing inventory on these more attractive acres. To avoid a significant increase in staff time for harvest layout and administration, this would almost certainly lead to higher removals per acre and harvest control methods less intensive on average than now in use. Any changes in this regard would need to be restricted to areas outside those identified as visually sensitive, even class 2 visual, or we would almost certainly be spending time answering public criticism.

Certification: We might have some difficulty justifying a harvest that equals 100% of net growth just to cut more wood, as auditors are probably well aware of the "logistics discount". If we thought that some inventory reduction were desirable (and I'm not recommending that, at least not now), a 150K harvest would take some 15 years to drop the current inventory by one cd/ac, assuming all else is equal. If our hypothetical inventory reduction was silviculturally justified, then the greater harvest would also pass muster.

Reference 12

C. Surveillance audit n° 2

The second surveillance audit of the Maine Bureau of Parks and Lands (herein after referred to as "MBPL") examined their compliance with the FSC US Forest Management Standard v1.0.

15 - Base of evaluation

15.1 - Date of the surveillance evaluation

4 - 8 November, 2013

15.2 - Composition of the audit team

Lead auditor: - Matt Tormohlen, FSC FM lead auditor on behalf of Bureau Veritas Certification, contractor.

Auditors: - Jim Colla, RABQSA qualified lead auditor; FSC FM auditor on behalf of Bureau Veritas Certification, employee.

15.3 - Forest management referential used for the surveillance audit

For this surveillance audit, we referred to the checklist (ref. FSCUS FM) extracted from the forest management referential for the FSC US Forest Management Standard v1.0. In addition FSC-STD-20-007 v3.0 Forest Management Evaluation was applicable. No changes have occurred to these standards since the 2012 surveillance audit.

16 - Information collecting modalities

16.1 - Description of the audit program

The audit began with an opening meeting where audit objectives and scope were discussed along with field sampling and confidentiality. The auditors reviewed MBPL management records and record keeping systems; documents, policies and procedures; and internal management controls. Field activities were evaluated by examining 11 sites in the North region where silvicultural, road and stream crossing activities have been implemented since the last audit in 2012.

Audit Schedule

Date	Time	Activity	BVC Representative	Company Representative
4 Nov.	800	Opening Meeting	Tormohlen/ Colla	Mr. Tom Charles

Reference 13

	0830	Maine BPL to present summary of previous years activities	Tormohlen/ Colla	Mr. Tom Charles
	0900	Follow up on 2012 findings	Tormohlen/ Colla	Mr. Tom Charles
	1000	Review of Crocker Mtn. parcel addition	Tormohlen/ Colla	Mr. Tom Charles
	1100	Document Review Lunch	Tormohlen/ Colla	Mr. Tom Charles
	1300	Document review	Tormohlen/ Colla	Mr. Tom Charles
	1500	Field visit logistics and depart for North region	Colla	Team 1
	1500	Document review	Tormohlen	Mr. Tom Charles
	1700	Closing meeting, day one	Tormohlen	Mr. Tom Charles

Date	Time	Activity	BVC Representative	Company Representative
5 Nov.	800	Opening Meeting	Tormohlen	Mr. Tom Charles
		Depart for field sites	Colla	Team 1
	0830	Document review	Tormohlen	Mr. Tom Charles
	1200	Lunch		
	1230	Document review	Tormohlen	Mr. Tom Charles
		Field sites	Colla	Team 1
	1500	Depart for North region	Tormohlen	Mr. Tom Charles
	1800	Closing meeting	Tormohlen/ Colla	Mr. Tom Charles
	1900	Auditor de-brief	Tormohlen/ Colla	

Date	Time	Activity	BVC Representative	Company Representative
6 Nov.	0730	Opening Meeting/Depart for field sites	Tormohlen/ Colla	Mr. Tom Charles
		Field sites	Tormohlen/ Colla	Mr. Tom Charles
	1730	Closing meeting, day 3	Tormohlen/ Colla	Mr. Tom Charles
	1900	Auditor de-brief	Tormohlen/ Colla	

Date	Time	Activity	BVC Representative	Company Representative
7 Nov.	0730	Opening Meeting/Depart for field sites	Tormohlen/ Colla	Mr. Tom Charles
		Field sites	Tormohlen/ Colla	Mr. Tom Charles
	1730	Return to Bangor Closing meeting, day 4	Tormohlen/ Colla	Mr. Tom Charles
	1900	Auditor de-brief	Tormohlen/ Colla	

Date	Time	Activity	BVC Representative	Company Representative
8 Nov.	0800	Opening Meeting	Tormohlen/ Colla	Mr. Tom Charles
	0830	Final document review/Auditor Caucus	Tormohlen/ Colla	
	1200	Final closing meeting/Audit Findings/Next steps	Tormohlen/ Colla	Mr. Tom Charles
	1300	Depart site	Tormohlen/ Colla	Mr. Tom Charles

16.2 - Total man days for the audit

A total of 14.5 person days was spent on the surveillance evaluation, including time spent in audit preparation, on auditing documents and records, interviewing stakeholders, carrying out field work and report writing.

16.3 - On-site visit(s)

On-site visits covered a variety of different silvicultural and road/crossing construction and maintenance activities. Within the Northern region, activities completed by four different foresters were reviewed to ensure consistent implementation of management plan objectives. Conformance to the management plan objectives, applicable state/federal laws and ME BMPs were evaluated at each site.

SITES	AUDITOR	DATE	DESCRIPTION
Oxbow N421	Tormohlen	5 Nov., 2013	This stand was an approximately 240 acre mixed wood (R. spruce/R. maple/S. maple) marked thinning. The original prescription developed in 2008 was modified prior to harvest to address the increased mortality of mature trees. This mortality issue had been further exacerbated by a recent "straight-line" wind event. Minor rutting had been noted by the forester and adequately addressed. Fixed head processing equipment was required to minimize residual tree damage. All roads and landings

			planted to clover for wildlife enhancement.
T15R9 Deboullie Township T13R12 Round Lake OBF Round Pond Chase Brook Bridge	Tormohlen/Colla	5 Nov., 2013	Intermediate cutting units inspected. 2.5 mile new road construction. BMPs in conformance, well stocked stands of desired species. Wet areas protected. Trees were marked to cut, peer reviewed prescription. Excellent protection of residual trees during harvesting. Contract logging service (CLS) contract. Site shut down during wet conditions. Logging contractors CLP qualified; had first aid and spill kit on site. Well informed with respect to meeting and implementing BPL objectives. Trail head and recreational trail also constructed, very popular. BPL to seek permanent ROW. Blowdown from June 2013 tornado, 120 ac impacted. Salvage logged. Quickly built spur road and were harvesting within a month. Two small stream crossings (culverts) well installed, RMZs protected. Eagle Lake visual considered, very minor impact; advance regen present throughout. BMPs and regulations in conformance. Stumpage contract. Intermediate cutting units inspected. No new road construction, access through Irving. BMPs in conformance, well stocked stands of desired species. RMZs and wet areas protected. Trees were marked to cut, peer reviewed prescription. Excellent protection of residual trees during harvesting, heavy to cedar. Eagle Lake visuals considered; no impact. Four year stumpage just complete. Site shut down during wet conditions.
T15R9 Deboullie Township T13R12 Round Lake OBF Round Pond Chase Brook Bridge	Tormohlen/Colla	6 Nov., 2013	5 miles of new road construction in Deboullie TWP determined well implemented specifications for main haul roads (crowned surface, solid aggregate, widened ROAs, stabilized cut banks and proper drainage installations.) Crossings of classified trout streams were crossed with 4' "squash" pipes with approaches effectively stabilized to prevent erosion, ROA narrowed and culverts placed at proper depth to allow for fish passage. 30' bridge installation across Chase Brook was in process at the time of this audit. The location was chosen to replace poorly located and unsafe existing bridge down-stream. Installation had been suspended due to wet weather. Construction area around the bridge had been stabilized prior to removal of machinery. All harvest sites were mixed wood (conifer/hardwood) and demonstrated well planned skid trails (oriented and flagged to minimize visual disturbances), effective implementation of the silviculture prescriptions and adaptive sale-set up activities to address micro-sites within the harvest unit. Haul roads and landings were well placed and remediated/seeded post-harvest. Outcome Based Forestry (OBF) site consisted of complete removal of all stems >1", with the exception of 1-2 Y. birch/acre to act as seed source. The location was selected due to the large beech component and the planned outcome was to reduce the beech component and encourage other mid-tolerant species to dominate the regenerating stand.
Bald Mtn. T7R12 Chamberlain Lake Indian Lake	Tormohlen/Colla	7 Nov., 2013	Harvest sites were either mixed wood or conifer dominated. Both stand types were marked for thinning and demonstrated effective field implementation of the silviculture prescriptions. Fixed head processer requirements minimized residual tree damage and protected advanced regeneration. Skid trails on excessive slopes (>30%) were well stabilized with water-

			bars, terrain breaks and cross drains. Several ephemeral drain crossings had been stabilized with slash and cleared and remediated after harvest. Two miles of road construction was well implemented, complied with ME BMPs and met industry standards for main haul roads. SMZs established along intermittent streams were adequately sized and identified with flagging. Lynx noted in prescription, no impacts. Harvest timing and skid trail orientation to avoid noise pollution and aesthetic issues in Alagash Wilderness Waterway.

16.4 - Documents review

MBPL maintains a comprehensive document and quality control system that is comprised of the Integrated Resource Policy documents, Regional Management Plans and the individual harvest prescription documents. These documents illustrate conformance to the applicable indicators of the FSC US FM standard. A partial list of reviewed documents includes:

- MBPL 2012 Annual Report
- MBPL Integrated Resource Policy
- Northern Aroostook Management Plan
- North Region Management Plan (5-year review process)
- ME BMP Guidelines
- ESA
- CITES Applicable list
- MBPL HCVF Assessment (2013)
- Annual Allowable Cut (AAC) report (2012/2013)
- AAC Justification (proposed)
- Silvicultural Advisory Committee (Meeting Minutes)
- Crocker Mountain Acreage Addition (Map and Mgmt. Plan)
- Employee Safety Policy
- Hazardous Material Policy
- Maine Audobon Consultation (2013 Meeting Minutes)
- TNC Consultation (2013 Meeting Minutes)
- 2013 stakeholder contact list (Meeting minutes)
- Round Pond OBF Report
- Duck Lake HCVF Trespass Report
- MPBN Harvest Increase Article (8/22/13)
- MBPL Revenue Allocation (ME AG, 15 Dec., 1992)
- Maine Revised Statute Annotated (M.R.S.A.), Title 12
- Maine Forest Practices Act
- Maine Forest Service Rules, Chapters 20, 21
- Maine Land Use Regulation Commission Laws and Statues, Ch. 10
- Maine Land Use Regulation Commission, Comprehensive Land Use Plan
- Maine Endangered Species Act
- Maine Natural Resources Protection Act

16.5 - Stakeholders identification and consultation

Stakeholders were first identified and were formally consulted prior to the 2011 transfer/re-newal audit. Consistent with FSC stakeholder consultation requirements (i.e. FSC-STD-20-006) consultation is only required "where necessary", meaning in relation to outside complaints, stakeholder concerns, and controversial activities.

Prior to this surveillance audit, three individuals contacted the certification body with concerns in regards to the MBPL proposed increased harvest level. The un-solicited concerns voiced by these individuals were as citizens of Maine and not affiliated with any organization. Two of the individuals responded to the lead auditor request for consultation prior to the audit. Stakeholder concerns centred around the following;

- Perceived lack of public consultation in regards to the proposed increase in harvest level.
- Lack of communication of the justification for the increased harvest levels.
- Discrepancy between the stated management objectives of the MBPL ownership and the proposed decision to increase harvest levels.
- No evidence of landscape analysis of the benefit provided by the higher stocked stands of the MBL located in the midst of lower-stocked industrial lands.

MBPL was aware of the issues presented by the stakeholders prior to this surveillance audit. In addition, the Silvicultural Advisory Committee, presented with the proposed increased harvest levels, voiced several concerns/questions in regards to the implementation of the proposal (*full details of MBPLs draft justification and proposed plans are attached in the appendix to this report.*)

MBPL is still in the planning process of the increased harvest level and the final proposal will be reviewed by the legislative committee of jurisdiction (Agriculture, Conservation and Forestry Committee) in a presentation by the bureau which is open to the public (tentatively scheduled for March.) Two observations were issued during this surveillance audit to more formally address stakeholder concerns and SciAd committee questions. The increased harvest level issue will be re-visited during the 3rd surveillance audit to assess full conformance of the finalized plan.

16.6 - Interview(s) of involved people met

Employee(s):

- Tom Charles – Chief Silviculturalist*
- Joe Wiley – Wildlife Biologist*
- Tom Morrison – Director of Operations (Maine BPL)*
- Will Harris – Bureau Director (Maine BPL)*
- Doug Dennico – State Forester (Maine Forest Service)
- Chuck Simpson – Regional Manager*

- Pete Smith – Regional Manager*
- Verne Labbe – Regional Manager
- Mark Dechene - Forester
- Ed Dube - Forester
- Chet Condon - Forester
- Jacob Guiemond - Forester
- Don Kidder - Forester

Sub-contractors:

- Kyle Pellitier – Logging contractor
- Joey Depres - Logging contractor
- Deney Depres - Logging contractor

16.7 - Other evaluation techniques

None.

16.8 - FSC trademark use control

Off product use has been previously sought and approved by Bureau Veritas for use of various FSC trademarks on load delivery tickets. This was done to address a non-conformance issued during the first surveillance. All audited trademark use was found to be in conformance during this surveillance.

16.9 - Controversial elements

The organization is in the planning process of increasing its harvest levels. The current AAC of 141,500cds includes a logistics discount of approximately 15% (removes volume that is not realistically able to be harvested either because the volume grows in stands not economically feasible to be harvested or volume that is too far from current access roads.) MBPL states that "other land managers who use spatially explicit models and logical economic constraints" find logistics discounts of between 10-15%. Since they are currently at the conservative end of that range, they propose to reduce that discount to 10%, which would add an additional 9,500cds/yr, increasing AAC to 150,500. The MBPL also suggests that current net growth/ac/yr numbers are conservative by 0.1-0.2 cds/ac/yr and that growth rates on their property is approximately 18% higher than statewide averages.

MBPL also has reviewed their timber/acre volume and how much they "should" be carrying. They currently have 23cds/aca cross the ownership and have compared this to privately owned forests and decided on a future desired stocking of 21.5cds/ac. This would amount to an increase of 600,000cds of harvestable volume, which is planned to occur over 20years (30,000 additional cords/yr.) The

proposed 21.5cds/ac/yr is a reduction of approximately 6.5% and would bring per acre volumes back to stocking densities present on the ownership 10 years prior.

Several stakeholders have voiced concerns which MBPL is aware of and is working towards addressing. The final proposal of increased harvest levels for the next 20 years must be approved by the legislative committee of jurisdiction (Agriculture, Conservation and Forestry Committee) in a presentation by the bureau which is open to the public (tentatively scheduled for March, 2014.)

This issue will be further reviewed by this Certification Body once MBPL has finalized its proposal and is in the implementation stage. The organization has stated that maintaining 3rd party forest certification is essential in implementing this increased harvest level.

16.10 - Changes since last audit

See below table for change in ownership. The addition (4,777ha) in the West region is comprised of the addition of the Crocker Hill parcel which is adjacent to the Bigelow Preserve (Mt. Abrams Township.) This parcel was purchased in July, 2013 from Plum Creek. The added acreage is natural forest and is incorporated into the management plan of the Bigelow Preserve. There exists an additional ~19,000 hectare difference from the original land area stated on the 2011 transfer audit report. This difference is the result of updating ownership acres using GPS/GIS data versus utilizing the original deed records. Additionally, three parcels were purchased in late 2011/2012 and are described below:

- Tumbledown Mountain: 4,048ha
- Amherst Parcel: 2,018ha
- Seboeis (added to south end of existing Sebo unit): 2,313ha

All added acreage is natural forest comprised of native species and is incorporated into the regional management plan which it is located in.

The Duck Lake HCVF accidental timber trespass noted in last year's audit report has been effectively resolved. MBPL has been reimbursed for the harvested volume, the roads have been evaluated and effectively stabilized and the harvested area is regenerating naturally.

There has been no turnover of key personnel, with the exception of one forester in the West Region.

FMU	Acres	Hectares	Ha Change from 2012

West	157,000	63,562	+ 4,777
East	188,000	76,113	0
North	260,000	105,263	0
Total	*605,000	244,939	+ 4,777

The organization has targeted Japanese knotweed, Barberry and non- native honey suckle for herbicide treatment prior to harvest. These invasive plants are treated prior to harvest so that when the stand is harvested, the invasive are not released to compete with desired regeneration. The following chemicals and rates (rates determined to be within the specified label limits) were applied since the previous surveillance audit:

- Imazapyr (72oz on 5 acres) in the Pineland Parcel (West region, Cumberland County.)
- 40 ac old field restoration project for wildlife (Days Academy): 100 stumps treated with 20oz of Triclopyr after harvest to prevent suckering. West Region (east side of Moosehead.)

16.11 - Surveillance audit closing meeting

A closing meeting was held at the Bangor, ME office on 8 November, 2013. All MBL employees noted previously (closing meeting participants identified with asterisk) were present. In addition, both audit team members were present. At the closing meeting audit findings, next steps, non-disclosure and appeals were discussed. The auditor conclusion was to recommend continued certification; this finding was acceptable to MBPL.

17 - Audit team observations

17.1 - Actions taken in order to answer to the non-conformities from the previous audit

There were two minor non-conformities and two major non-conformities issued the 2012 surveillance audit. All non-conformities issued during the 2012 surveillance audit were closed off-site on the dates listed below. Additional follow-up to ensure complete closure of the issues was completed during the 2013 surveillance audit.

NC #	NC description	P&C indicator number	Action taken by the entity to close the NC	Closed/ Open	Date of Closure
08-2012 (Minor)	Ensure that culverts and all other building materials are removed from the harvest sites in a timely manner.	FSC US FM v1.0 1.5a	Corrective Action Implementation: Cleanup requirements have been added to harvesting contracts. Method used to verify effectiveness of action taken: All new contracts and amendments will have this additional language. Contractors working under old contracts are being instructed to clean up materials according to the added requirement. Final job inspection reports include a line for evaluating cleanup performance.	Closed	13 Feb., 2013
09-2012 (Minor)	Ensure that all promotional logo and trademark use is reviewed for conformance to the requirements of the FSC-STD-50-001 and is re-approved by the Certification Body.	FSC-STD-50-001V1; 1.15	Corrective Action Implementation: Brochures currently under development and the annual report will have conforming logos/trademarks. Signs will be updated during the coming field season. Method used to verify effectiveness of action taken: Inspection of brochures, signs, reports on a continual basis.	Closed	13 Feb., 2013
01-2012 (Major)	Revise stumpage contracts to include safety provisions and specific contractor qualifications related to the standard.	FSC US FM v1.0 4.2.b	Corrective Action Implementation: CLP/Master Logger requirement has been added to harvesting contracts. Method used to verify effectiveness of action taken: All new or amended harvesting contracts will have the additional language. We will check the online databases for Certified Logging Professionals and Master Loggers when preparing contracts. A quick look earlier today showed that the CLP list had last been updated on March 13, 2013, and ML on February 28, 2013. If there remains any question about whether a contractor is qualified under this requirement, we will ask for documentation.	Closed	13 Feb., 2013
02-2012 (Major)	Modify trip tickets to include FSC claim (FSC 100%) and either update the logo to the new promotional logo or eliminate the logo. Also, ensure that the correct CoC # has been added to all required sales and shipping documents.	FSC US FM v1.0 8.3.a	Corrective Action Implementation: All contractors have received the new trip tickets. Letters have been sent to facilities receiving DPPL wood, explaining the trip ticket/CoC situation in 2012. Method used to verify effectiveness of action taken: Contractors have returned all old tickets, which then were destroyed.		13 Feb., 2013

Comments:

Stakeholder concerns brought to the Certification Body are addressed in section 2.5 and 2.9 of this report.

17.2 - Action taken in order to answer to previous observations

No observations were raised during the 2012 surveillance audit.

17.3 - Evaluation of the general conformity level of the entity

A general overview of the management of the MBPL property by MBPL staff leads to the conclusion that there is a well-developed management system in place. Staff foresters are very knowledgeable of their respective responsibilities and demonstrate excellent implementation of silvicultural. MBPL managers have developed a sound management plan and are continually monitoring the conformance of the day to day operations with the requirements of the IRP, the Regional Management Plan, ME BMPs and the FSC US FM standard.

17.4 - Eventual changes in the scope of certification

None expected in the near term.

18 - Proposals regarding the certification decision

18.1 - Description of new observations

Observation #1 (4.4.d)

Consider more formal efforts to seek and consider input in management planning surrounding the proposed increased harvest levels.

Observation #2 (5.6.a)

Consider additional emphasis and integration in the planning process of applicable FSC requirements when reviewing the harvest levels.

18.2 - New Minor Non-Conformities

No new minor non-conformity has been issued during this surveillance audit.

N°	Minor Non-Conformity	Proposed date of implementation	Requirement number
	None issued		

18.3 - New Major Non-Conformities

N°	Major Non-Conformity	Proposed date of implementation	Requirement number
	None issued		

18.4 - Conclusion of the audit team

The applicant has demonstrated that the described system of management is being implemented consistently over the whole forest area covered by the scope of the certificate. Maine Bureau of Parks and Lands is recommended for immediate continued certification as of 8 November, 2013.

19 - Certification decision

FSC forest management certification shall be continued.

Issued the end of 7 January 2014, reviewed January 24, 2014

FM certification technical manager,

Brian Callaghan

Lead Auditor,

Matt Tormohlen

FSC US Standard, Indicator 4.4d:

Indicator 4.4.d For public forests, consultation includes the following components:
1. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans;
2. Public notification is sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management;
3. An accessible and affordable appeals process to planning decisions is available.

Planning decisions incorporate the results of public consultation. All draft and final planning documents, and their supporting data, are made readily available to the public.

FSC US standard, Indicator 5.6.a:

Indicator 5.6.a In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The sustained yield harvest level calculation is documented in the Management Plan.

The sustained yield harvest level calculation for each planning unit is based on:
•documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions;
•mortality and decay and other factors that affect net growth;
•areas reserved from harvest or subject to harvest restrictions to meet other management goals;
•silvicultural practices that will be employed on the FMU;
•management objectives and desired future conditions.

The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.

Intent: The term "sustained yield harvest" refers to harvest levels and rates that do not exceed growth over successive harvests, that contribute directly to achieving desired future conditions, and that do not diminish the long term ecological integrity and productivity of the site.

The method used to calculate the sustained yield harvest level for timber products is commensurate with the size and intensity of the forest management operation.

For FMUs in which harvesting occurs infrequently, harvest levels and/or re-entry frequencies are set consistent with achieving and/or maintaining desired future conditions.

To: Harris, Will
Cc: McLean, Carlisle
Subject: Governor's Bill - Public Lands

Will,
I don't believe we have had the opportunity to meet, but look forward to working with you. I worked for a number of years on the Forest Legacy Program for Senator Snowe and heard your name a few times and look forward to connecting in person.
As Carlie has discussed with you, we have been working on an initiative to modify how the revenue from timber harvest of state lands would be utilized and wanted to see if you had any suggestions on improving this draft bill.
The intent of the initiative is to maintain a base amount of funds for the current use of revenue based on the average revenue that the state has received, but to utilize funding beyond that base level for addressing heating costs through a conversion to biomass heat. Effectively, if the state receives revenue beyond a certain threshold the state would divert that funding to this new initiative. We suspect that other sections of the statute may have to be modified to align with the intent of the bill, but this part of the state law is a bit foreign to me.
Would you mind reviewing the draft attached and providing some feedback/suggestions to both Carlie and me?
Patrick

Patrick C. Woodcock
Director
Governor's Energy Office
State of Maine
207-624-7405

Reference 14

Cathy Johnson

From: Harris, Will <Will.Harris@maine.gov>
Sent: Wednesday, October 16, 2013 11:33 AM
To: Cathy Johnson
Subject: RE: Document question

Cathy,
It was went on 4/23/2013.
Will

From: Cathy Johnson [mailto:cjohnson@nrcm.org]
Sent: Tuesday, October 15, 2013 5:22 PM
To: Harris, Will
Subject: Document question

Will – One of the documents you provided me regarding increased harvesting on public lands was an email from Patrick Woodcock to you titled: "Governor's Bill – Public Lands." (A scanned copy is attached.) There is no date on the hard copy of the email you sent me. Can you please tell me the date of that email?

Thanks.

Cathy

Catherine B. Johnson, Esq.
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FOREST STOCKING – WHAT IS THE "RIGHT" VOLUME TO CARRY?

The desired volume of stocking can vary tremendously, according to site conditions, species present (or desired), and landowner objectives. However, forest researchers have determined the ranges of optimal stocking for many species groupings, as shown in the various silvicultural guides. These publications generally include stocking curves with points labeled A, B, and C, with the following descriptions.

-- A-level stocking is considered the maximum level before overstocking causes loss of tree vigor and unacceptable mortality.

-- B-level stocking represents the lowest stocking at which the site is considered to be fully utilized.

-- C-level stocking is considered understocked, but sufficient to achieve B-level within ten years.

One reasonable assumption for these stocking levels is that net growth will be similar for all stocking levels from A to B, but will be reduced (due to excessive mortality above A, or to inadequate site utilization below B) for levels outside that range. Theoretically, any forest-wide stocking level within that A-to-B range can have validity as "right" stocking.

The stocking curves are shown by basal area and trees per acre, and translating that into volumes has to take average tree size into account. Larger trees allow greater volumes per acre within the range of full stocking for at least two reasons – the larger trees are almost always taller, and they have a smaller proportion of their total volume in material too small for conventional merchantability. For spruce-fir, northern hardwood, and mixed S-F/Northern Hwd stands, which together represent the majority of BPL forest acres, the full-stocking volume range runs from about 15 to 30 cords per acre for stands where tree size is near the current average for BPL lands. The 2011 inventory shows the Lands regulated forest at about 23 cords per acre, near the middle of that range. (Note: Pine type ranges for full stocking are perhaps 1/3 higher than for the above species groups, but only about 1% of the BPL forest is pine type.)

Some trade-offs for managing at the high or low ends of the fully stocked ranges:

At the high end, significant delays in harvest plans can lead to increased mortality as stocking climbs above A-level, and there is more value kept on the land and thus at risk from natural factors such as windthrow or insects. Also, for a landowner starting with non- or low-stocked lands, there is a long wait to achieve that higher stocking. The older and larger trees which are usually more common at the high-volume end are almost always more valuable than smaller trees. The high-end forest is likely to have a greater proportion of late-successional tree species and stand characteristics.

At the low end, the desired stocking can be achieved more quickly, and there is much less value held for decades at risk from natural mortality. It is better suited to growing trees on shorter rotations, as maintaining this low-end stocking with less windfirm species like spruce, fir, hemlock, and aspen can result in unacceptable blowdown losses if held too long, and low-stocked northern hardwoods will lose grade/value due to limb retention. Shorter rotations are financially attractive for landowners with large carrying costs, such as interest on land purchase price and real estate taxes. These lower-stocked stands are more likely to have early or mid-successional character.

Ken Laustsen mined the FIA data for growth rates among different landowner groups. Not all the public ownership is BPL, but we are by far the biggest player. Below are figures (in cd/ac/yr) for six landowner groups, followed by my comments:

Owner Group	Net Growth	Mortality	Gross Growth
Public Ownerships	0.432	0.203	0.635
Forest Industry	0.330	0.175	0.505
Corporate Investors (TIMOs, REITs)	0.342	0.168	0.510
NGOs, Assoc, Native Americans	0.370	0.244	0.614
Family Forests (7-I, P&C, etc)	0.404	0.185	0.589
Statewide	0.365	0.179	0.544

I don't have the volumes for each landowner group, but I'm quite sure that the highest stocking groups are public and NGO+, the lowest industry and investor. If the goal were to be limiting mortality, the latter two lead the way. However, net growth is what is available to harvest over the long term, and given the above numbers, it looks like BPL is in a very good position with its current management strategies.

Reference 15

7/27/13 Sylvaculture Advisory Committee
Evening discussion of Harvest levels

Will & Tom - Give Overview -
Reviewed w staff
SIAC Review
Audit Review this Fall
Legislative Committee - Reviewed as part of annual plan -

Bob Seymore -
Why is the perception of stocking too high?
He thinks we are not there -

Tom - doesn't think growth too much -
Our net growth is higher than anything -
we should be proud of our mortality levels because the mortality grows our net growth -

Kip -
Thinks we have more capacity than we think
Can get more out of - Have them cut more
Have to watch CIS that we don't actually lose $ from what we would get from stumpage -
Use periodic checks to see if we need to ramp it down -

Reference 16

Bob - questions the scientific basis for the need to make adjustment
- hands should be more different, rather than more like

Mac - what about public involvement
- the forest one — a period of restoration, unfortunate to revert to

Kip - • thinks we probably have more capacity than we think
• CLS, when all costs are accounted for, may result in less $ per cord
• periodic reviews critical

Bill L • the wood is growing fast enough

with adequate staff, to maintain quality of work, capturing more mortality (which is not a bad thing)
• look at information in board feet or cords/acre over 10" DBH you will see a bigger difference

Bob - No forest dynamics done by WILKIN
No forest dynamics says 23 is too high.
potential peak is 40-50, we're at/near sweet spot

Mortality on public lands is not a bad thing. We should be proud of that most, as our net is tops.

Mac Any thing on public/stakeholder informing beyond the audit/legislature? Reactive only?

Will - more of an adjustment than a new policy.
Major public interest lies elsewhere, not in the thick weeds of G&Y.

Bill - calculate 141 TC .357, net .422 84-85%

Momentum in state gov -
TM - still working to solve. proper operation involvement by staff
available area (contracts not met)
(or, new contractors make available)
Mac - Danger of accepting less skilled dir?
Will - no, and would use some of extra $ to train ops in modern equip.
Could chg back quickly.

Kip - Could get more production out of current dir TC - w/ some standards
might have CLS costs may not be well known. Could $35/cd become $28?
stumpage is more cut and dried
Need to strategically target where we implement river harv.

Bill - The woods will grow that fast (he thinks .45-.50) is contracting the issue?
Mac - Maine too now in period of restoration, after a period of degradation.
Bob - Rose is to be more diff, not less.
I have no issue with [141]
Will - Is the issue 180 (+40) or that it starts us down the road to being like industry.

Reference 17

Bob – If we hired 2 more for /rep, we could capture more, keep the LS, improve the qual, cut 180 and be proud of it. (and not drop inv.)

Just pushing curr. staff to 180 will lead to a blow-up, inevitably.

[Bob gives us loads of compliments]

"This kind of cool. Forestry you do has no consistency unfortunately

(Bob wants, and I agree – angry we're getting dinged for doing what's right. wants us to push back. – ~~Cut~~ cut Δ in trees 10"+ ?

Bob – Moving the harvest up to 180 (or whatever) is the most important decision a for. mgr can make.

This increase is ~~based~~ on shaky ground. Gets into some ethics. If foresters are uneasy, but have to do it, that's sad.

Vern – New mills in N. Maine "oblitonity"?

TM – Had a chance to discuss this with S. Intends to do same to Bill P and Jim R

Cathy Johnson

From: John Gunn <jgunn@sig-nal.org>
Sent: Thursday, October 03, 2013 3:16 PM
To: Cathy Johnson; Eliza Donoghue; Andy Whitman
Subject: FW: Increase of BPL harvest and FSC certification

Here's the response I got back from Tom Charles at BPL. A bit surprising to see that a 2 cord/acre increase of stocking over a 12 year period is a cause for concern about additional mortality. Given the geographically diverse landbase, I don't know how you can make a management decision like this. Looking forward to digging into this further. Certainly seems like a decision from above to generate revenue then trying to justify it after the fact.

From: Charles, Tom T. [mailto:Tom.T.Charles@maine.gov]
Sent: Thursday, October 03, 2013 3:01 PM
To: jgunn@sig-nal.org
Subject: RE: Increase of BPL harvest and FSC certification

This reply is divided into two parts. The first discusses our sustainable harvest level (SHL), and the second addresses the FSC conditions you cited.

As an outcome of forest modeling done in 2006 using data from the (then) most recent landbase-wide inventory done in 1999, the SHL was set at 115,000 cords per year. In autumn 2011 another landbase-wide inventory was conducted, revealing an increase of slightly more than two cords per acre since the 1999 measurements. Those results, a second modeling effort conducted in summer 2012, and FIA data received from MFS, led to the SHL being raised to 141,000 cords per year. This year, Administration concerns that our relatively high stocking levels would lead to additional mortality, plus the increasing presence of spruce budworm to our north, resulted in a proposal to reduce that stocking level by 1.5 cords per acre over a 20-year period. Given our estimated net growth, that would require SHL to be ramped up to 180,000 cords per year. The 141,000 cord SHL was first applied to fiscal 2013 and remains in effect for fiscal 2014. The increase to 180,000 would take place over several years beginning in fiscal 2015, which starts July 1, 2014. Any increase in SHL would be done in such manner as to remain within our legislative mandate to conduct "exemplary land management practices, including silvicultural, wildlife, and recreation management..."

Our agency involves the public and their representatives in the legislature at several levels. Meetings for our regional management plans are open to the public and include an advisory committee that includes many stakeholders. This was also the case for our directing document, the Integrated Resource Policy. We provide a record of our activities, including harvesting and SHL, in the annual report to our legislative committee of jurisdiction (Agriculture, Conservation, and Forestry), and report to that committee in a presentation open to the public. Notification of this presentation is posted on the legislative committee calendar. The annual reports are posted on the Parks and Public Lands website, with reports earlier than 2012 under the Planning and Acquisition tab. At the presentation in March 2012, the committee was informed of the inventory results and the probable increase in SHL, though the proposed number was not yet determined. The 2012 annual report included the new SHL (141,000 cords) and that SHL was discussed during the presentation that followed in March 2013. The increase in SHL was also presented to the auditors during the start-up meeting of our annual surveillance audit in November 2012, though the 2012 audit report continued to note the former SHL of 115,000 cords, probably because it was reporting past harvests versus SHL. The proposal to increase SHL will be presented to the auditors at this year's surveillance audit in November, and to ACF committee members early next year. Neither the ACF committee, hearing attendees, nor the auditors have expressed any concerns about increasing SHL to 141,000 cords per year. Prior to conducting any harvest operations designed to reach SHLs above those previously presented to our legislative oversight committee and auditors, we will hear their opinions of the proposed further increase. Our intent is to take action appropriate to what we learn during these proceedings. We will hear their opinions of the proposed further increase in the next few months, and take action appropriate to what we learn.

Reference 18

Summary: MFS Support for BPL Harvesting Activities

In a previous document, the case was made for increasing the harvest level off 393 thousand acres BPL controlled forest land by comparing BPL forest statistics with those of highly respected third party certified ownerships. The case was also made previously to have BPL adopt the "Service Contract" concept replacing the predominating stumpage arrangements and contracting out the marketing of harvested volumes. This document suggest ways the harvest increase can be accomplished using the current level of employee resources and time lines for completing the first phase of the effort – harvesting at the net growth level. The suggestion is advanced that given permission to reprioritize some work, professional assistance from the MFS can be made available to realize this first step of the potential harvest increase.

From the information and direction suggested in the two documents, MFS recommends that BPL and MFS management discuss how to proceed. It is recommended that a representative from the Administrations staff attend at least the first few meeting to help participants understand the future expectations of BPL's harvest levels and involvement with MFS employees including sharing budget and resource information.

The MFS would like to proceed from this point on with the BPL. Up until now, direst contact has been limited and access to information incomplete. The use of MFS professionals will require considerable dialogue between the Divisions.

For its part, the MFS looks forward to the cross training opportunities and the opportunity to work as a unified team.

MFS Support for BPL's Harvesting Activities

This report is a follow up report submitted to the Governors Office on 10 -22-12 and addresses many of the logistical aspects of increasing harvest levels on BPL lands, principally operational employee needs and infrastructure support. Factors such as financial management of the forest resource, risk of carrying high volumes of species subject to pending disease and insect damage and forest health and vigor should be given additional focus.

<u>Sourcing employees for operational needs:</u>

It is my understanding that BPL made a request for 5 additional forester positions in the current budget; two for marketing and three for on the ground foresters. The marketing function should be contracted out as outlined in the 10-22-12 report. BPL Forester requirements should first be addressed by surveying availability of existing talent in the MFS.

The Policy and Management Division of the MFS, managed by Don Mansius, has 9 licensed Foresters (District Foresters) in the field working on private land addressing

Reference 19

public inquiries and resolving infractions of forestry laws. Several of these foresters have a background in forest operations including harvesting.

The Forest Resource Protection Division under Bill Hamilton has about 60 Ranger II and higher positions that could be available for more technical work by shifting emphasis on certain priorities when fire danger is low. These folks are highly trained in forestry laws and are very woods wise. Their versatility should be sought for many activities such as marking (if this practice persists at its current level). The Rangers focus on operational inspections, equipment safety and resource protection; activities readily adaptable to BPL activities. A few Rangers are licensed foresters

Infrastructure support:

Another part of the Forest Resource Protection Division under Mike Devine also has a substantial field staff of mostly seasonal employees involved in inventorying the State of Maine's forest resources (some are licensed foresters). The seasonal employees can be held over to support whatever inventory work is now contracted out as well as to augment BPL's staff. MFS also has the skill sets to map inventory data and do analytical work now contracted out by BPL. MFS is on its way to having forest modeling capabilities which tell us what the future forest will be as opposed to and inventory which describes current conditions.

The MFS has the responsibility to report on forest conditions state wide. It is a logical step to give additional focus on smaller parcels such as those of BPL

Head count needs:

The number of employees needed to support an increased harvest on BPL lands will be linked to BPL's practices. As we have looked at other management models we find that field work to layout, inspect and close out harvesting jobs would require about 2.5 full time equivalent employees to increase BPL harvest level up to the net growth level of 152 thousand cords from its current level of 114 thousand cords. To cover manpower needs for road layout and administrative duties could require up to an additional ½ of a full time equivalent position. The MFS believes it can supply 2.0 full time equivalent employees provided it has permission to change the effort on certain MFS priorities. The 2.0 person equivalents will be achieved by accessing several different employees which will increase cross training opportunities. MFS believes there is a real opportunity to address the potential head count gap of 1.0 employees by changing operational procedures within BPL.

BPL employees could be trained and made available to fight fires during critical times to make up for reassigned MFS staff.

In addition to the field support listed above the MFS has the skill set to resource BPL's infrastructure needs such as forest inventory, modeling and mapping needs which are now contracted out. The inventory requirements would be met by just keeping on the

seasonal inventory crew. The MFS analysis and modeling effort could be redirected to BPL by supplying less information to commercial forestry businesses users and re-direct them to private forestry consulting firms. Some financial needs might arise if the current forest modeling program is ineffective. Mapping requirements could require training but that may be available in house.

Existing MFS employees would be used. The time needed to assist BPL infrastructure needs is difficult to calculate on an annual basis as some of BPL's needs are sporadic.

Costs for MFS Participation:

The MFS cost would be covered by BPL reimbursement. Money generated through timber sales would be applied in house rather than be used to hire contractors or new employees.

State government has shrunk to the point that "silo" organizational structures must be replaced with team work and cross training. A worth while project should help both impediments dissolve without the usual friction; the MFS believes this is such a project.

If positive energy is applied to using the MFS to augment BPL's work load, the net growth harvest level should be achieved during 2013. Further gains in harvest levels would be worked out for 2014 and on during 2013 after MFS, BPL and Administration consultation. There are numerous details to work out within the MFS and between BPL and the MFS and a directive should be developed to set the process in motion.

The recommendations here-in have been made with somewhat limited information. One of the first processes to go through would be to test assumptions through such methods as modeling. We can expect the degree of change but not its direction may be altered through more rigorous analysis. BPL is just finishing up its analysis of a recent forest inventory and this may bring some new perspectives.

MFS needs:

Support to reprioritize work to free up time to assist BPL, possibly the purchase of a more advanced forest modeling tool, fill some key funded MFS positions and direction to MFS and BPL to move forward to develop a complete plan and test assumptions by a given date.

The MFS is available to set down with BPL managers directly to work out questions and develop a path forward.