HANSARD

NOVA SCOTIA HOUSE OF ASSEMBLY

COMMITTEE

ON

PUBLIC ACCOUNTS

Wednesday, April 6, 2016

LEGISLATIVE CHAMBER

Department of Natural Resources November 2015 Report of the Auditor General Chapter 6, Forest Management and Protection

Printed and Published by Nova Scotia Hansard Reporting Services

Public Accounts Committee

Mr. Allan MacMaster, Chairman Mr. Iain Rankin, Vice-Chairman Ms. Margaret Miller Ms. Suzanne Lohnes-Croft Mr. Brendan Maguire Mr. Joachim Stroink Mr. Tim Houston Hon. Maureen MacDonald Hon. David Wilson

[Mr. Terry Farrell replaced Ms. Margaret Miller] [Mr. Keith Irving replaced Mr. Brendan Maguire] [Hon. Sterling Belliveau replaced Hon. David Wilson]

In Attendance:

Ms. Kim Langille Legislative Committee Clerk

> Mr. Gordon Hebb Chief Legislative Counsel

Ms. Nicole Arsenault Assistant Clerk, Office of the Speaker

> Mr. Terry Spicer Deputy Auditor General

WITNESSES

Department of Natural Resources

Mr. Frank Dunn, Deputy Minister Mr. Allan Eddy, Associate Deputy Minister Ms. Diane LeBlanc, Director, Organizational Strategy and Renewal



HALIFAX, WEDNESDAY, APRIL 6, 2016

STANDING COMMITTEE ON PUBLIC ACCOUNTS

9:00 A.M.

CHAIRMAN Mr. Allan MacMaster

VICE-CHAIRMAN Mr. Iain Rankin

MR. CHAIRMAN: Order. Good morning everyone, I call this meeting of the Public Accounts Committee to order. Today we're discussing Chapter 6 of the November 2015 Auditor General's Report. That chapter was on forest management and protection, and we have the Department of Natural Resources with us this morning. Let's start with introductions, beginning with Mr. Irving.

[The committee members and witnesses introduced themselves.]

MR. CHAIRMAN: Thank you. Mr. Dunn, would you like to begin by offering some comments?

MR. FRANK DUNN: I would, thank you. Good morning everyone. We welcome the opportunity to appear before the committee this morning and provide an update on the work undertaken by the Department of Natural Resources to address the Auditor General's recommendations around forest management and protection and the natural resources strategy. The recommendations by the Auditor General in his November report were well received by the department and I am pleased to report that DNR has already taken steps to implement these recommendations. You may be interested to know that earlier in my career as a civil servant that I myself was an auditor, seven years in fact. I understand the important role of the Auditor General and that role that he plays in government.

As the Auditor General pointed out in his report, forests are a big part in Nova Scotia and have a significant impact on the economy. We know this is true and everything the department does is based on the understanding that we need to manage Nova Scotia's natural resources in a way that sustains a balance of economic, environmental and social benefits for current and future generations.

The committee members will recall that the Auditor General provided four recommendations to the department and all four recommendations have been accepted. I would like to provide the committee with the current status of our progress on each of these recommendations.

The department has agreed that clear performance measures would accurately support conclusions on the status of the action on items that originate in *The Path We Share: A Natural Resources Strategy for Nova Scotia.* Work is underway to develop these measures and by August 31st of this year, our five-year progress report on the strategy will clearly articulate those results. The criteria will be based on what Nova Scotians told us and what they wanted from the strategy, four key areas: collaborative leadership, sustainable resource development, research and knowledge sharing, and good governance.

On the second recommendation which was to report on the status of the 21 forestry action items, DNR has committed to progress reports and will outline work to date or when work will begin, as well as any changes to the approach by August 31st of this year.

The response to the third recommendation, our department will implement a standardized monitoring system for Crown land operations. We have already implemented a comprehensive software system for reporting and tracking each truckload of wood from Crown land operations. The harvest monitoring program documentation is 90 per cent complete and will be 100 per cent complete by July 31st of this year.

Our Crown land production and sales reporting system went live in November and all products harvested from Crown lands are now tracked by individual truckload. The new system will greatly improve the tracking of wood harvested from Crown lands. Information will be updated weekly rather than the previous system of quarterly updates.

Our harvest management group will conduct annual management reviews on the provincial forest operations monitoring program. The management review will assess the overall effectiveness of the program, recommend changes to the monitoring procedures or schedule if appropriate, and establish objectives for improvement in compliance as they relate to performance by licensees.

The final recommendation was for DNR to implement a process to ensure Crown land silviculture has been completed to department requirements. Using a risk management approach, this monitoring system is now in place and allows the department to truly verify that silviculture work has been completed to department standards before reimbursement of operators.

I hope this overview of the progress that has been made on the recommendations made in the Auditor General's Report on forest management and protection has been helpful. I would like to conclude by taking a few minutes to explain to members the department's position on two topics that are of public interest currently.

Clear-cutting harvesting and its impacts are generally misunderstood by the general public. In Nova Scotia, the right treatment for any site has to be based on a pre-treatment assessment employing our forest ecosystem classification system. This system of forest management is based on more than a decade of collective and collaborative research by the renewable resources branch of DNR. This is leading to better decisions regarding forest management prescriptions across the province. We are also promoting the use of this ecosystem-based forest management through forest ecosystem classification training and outreach.

To date, more than 100 forest practitioners have been trained in forest ecosystem classification, which uses tree and plant species, soils, and wind exposure to identify appropriate harvest methods. These practitioners span DNR, industry and private contractors. Nova Scotia is leading the way in being transparent by posting maps of proposed harvest sites and methods online for public to review and provide input.

We work hard to find the right balance between environmental, economic and social aspects. It's important to remember that our province is among the top leaders in the country in protected areas. We have protected 12.4 per cent of our land mass. In Canada, this is exceeded by British Columbia at just over 14 per cent. However, it is important to note that in Nova Scotia, public land comprises only about a third of our total land base where the comparable figure in British Columbia is a whopping 95 per cent.

The final topic I wanted to briefly speak to is biomass. Another topic of public interest is the use of forest biomass. For some groups in Nova Scotia, the issue of cutting trees in our forests for the primary purpose of generating electricity has proved to be controversial. That is a statement taken from the province's electricity plan released in November 2015.

The plan goes on to say that the controversy has been mainly about whether the biomass harvested from forests for electricity could be put to higher and better uses, and whether biomass is a cost effective technology compared to other renewable energy options.

The department encourages and promotes the best use of fibre from Nova Scotia's forests and woodlands. We continue to demonstrate best practices on Crown land and encourage through outreach, education and engagement all private woodland operators to do the same.

Forest biomass is a useful addition to the supply of fuel for electricity, but over time there may be more cost effective and reliable alternatives. As renewable sources of electricity become available, the justification for primary forest biomass becomes narrower. As the new electricity plan states, Nova Scotia over time will look at opportunities to reduce the use of primary forest biomass for electricity.

I want to conclude on one final optimistic matter, particularly in light of our recent wintery weather, I'd like to share some good news with the members of the committee today around our provincial parks. As most committee members may know, we went live Saturday, April 2nd, with regard to reservations for the current year. We had a fantastic opening day, surpassing last year's season opening numbers by 38 per cent, or 1,118 reservations. That's 4,047 reservations in one day, which generated over \$350,000 in revenue. We're looking forward to a great season.

With that, Mr. Chairman, I welcome questions from the committee.

MR. CHAIRMAN: Thank you, Mr. Dunn. We'll begin with Mr. Houston for 20 minutes.

MR. TIM HOUSTON: Can you just recap some of those statistics you gave around the land mass? I think you said 12.4 per cent of the land mass is Crown-owned.

MR. FRANK DUNN: It's 12.4 per cent of the land mass has been protected. Crown land in Nova Scotia is somewhere around a little less than 35 per cent, I think it's about 33 per cent . . .

MR. HOUSTON: Above that 12 per cent?

MR. FRANK DUNN: No, no. The 12 per cent would be 12 per cent of Crown land.

MR. CHAIRMAN: Mr. Eddy.

MR. ALLAN EDDY: The 12 per cent is 12 per cent of the provincial land mass.

MR. HOUSTON: I'm sorry, I'm not clear, what is the provincial land mass?

MR. EDDY: It's about 6,500,000 hectares.

MR. HOUSTON: So 12 per cent of that is protected?

MR. EDDY: Under the EGSPA Act, 12 per cent of that was designated to be protected by December 2015 and the government reached that objective.

MR. HOUSTON: Is it all Crown land, that 12 per cent?

MR. EDDY: The vast majority of that is Crown land.

MR. HOUSTON: And what's the rest?

MR. EDDY: The federal parks would be included in that total number. There are some small portions of private land that have legal protections for other reasons that would have been included in that. But in general, the vast majority of that is provincial Crown land.

MR. HOUSTON: And there is a statistic that one-third is - I forget the context but it was something about one-third of other land mass . . .

MR. FRANK DUNN: That's the total land mass in the province. About one-third is Crown and the balance, being about 65 per cent, would be private land.

MR. HOUSTON: Okay, I'm fine, I understand. So in terms of the Crown land, which I guess should be 35 per cent of 6,500 hectares - is that the right way to look at that?

MR. EDDY: It's 6,500,000.

MR. HOUSTON: Hectares, okay. So 35 per cent of that is Crown. In terms of the Crown land, how much of that is leased? When I hear about Crown leases, is it all leased out or what per cent of that 35 per cent would then be leased out?

MR. FRANK DUNN: I'll start to answer it and allow Mr. Eddy to respond with some more detail. I think it's important to note when we talking working forests, about 27 per cent of the working forest in Nova Scotia is Crown land. There's some industrial land in there and then the balance of it would be private land.

If you're talking about leases in particular areas, we can talk about FULA or the lease for Port Hawkesbury paper, which is in the eastern counties of Nova Scotia. Northern Pulp operates through the Scott Maritimes Limited Agreement Act. The recently formed consortium called West For, in the western part of the province which includes 16 mills - stakeholders currently manage the land and have a lease in the short term, moving towards a FULA.

Directly to your question with regard to numbers, I don't have those. I don't know if Mr. Eddy does.

MR. EDDY: I don't have specifics on it and I guess it depends on what you classify as leased. Crown land is made available to industrial concerns in sort of two ways. There are area licences and I guess that's probably where you're coming from in terms of the traditional concept of a lease, and then there are volume agreements where the Crown undertakes to provide a certain amount of volume. That could come off all or a small portion of the land in question.

So in terms of the areas that are currently under lease, as you would probably understand it, I'm going to say the vast majority of Crown land in the seven eastern counties - there are some small exceptions there, but for all intents and purposes the Crown land in the seven eastern counties is captured under the Forest Utilization License Agreement with Port Hawkesbury Paper. That is an area based - of the eastern licence.

The Scott Maritimes Limited Agreement Act allows for a certain area and a certain volume to come together and there is about 100,000 tons involved in that from a large land base that sort of varies year to year in its operations.

MR. HOUSTON: Would it be fair to say that of the 35 per cent of the province that's Crown land, most of that is under some kind of - whether it's a lease or volume lease or area lease - would it be fair to say "most of" - and just in simple terms. I'm just trying to orient myself.

MR. EDDY: At this point in time, probably somewhere between one-third and 40 per cent is probably under an area-based licence.

MR. HOUSTON: That's the 30 to 40 per cent; would the rest be available for volume licences?

MR. EDDY: That's correct.

MR. HOUSTON: In terms of the area leases, is that always the same lease? If there's an apartment and there are 100 apartments, they pretty much all have the same lease. Is it the same concept in the department?

MR. EDDY: Yes. It's important to recognize that it has changed quite dramatically. Those lands used to be held under the Stora Forest Industries Act, which gave the companies almost complete control over those lands. That Act has been repealed and they're now held under the Forest Utilization License Agreement, which gives the Crown far more flexibility. We have the right to remove lands from those licences if we need them for other purposes.

MR. HOUSTON: So if a party has a lease under the old way and they were looking for softwood, they had the rights to everything on there - hardwood, softwood, everything on there. They had full rights over it. Is that not the case today?

MR. EDDY: It's similar, but with some very important differences. They're responsible to manage those lands and they have the ability to harvest various volumes from it. The Crown has a commitment in the case of Port Hawkesbury Paper of 400,000 metric tons per year of softwood. They can also harvest hardwood as well, but in the past they weren't obligated to make any of those other volumes available to other companies. Under the Forest Utilization License Agreement, there are mechanisms in there which require them to work co-operatively with other industries.

MR. HOUSTON: That's helpful. In terms of if you look at the Crown lands in Nova Scotia and the revenue return to the province, which would mainly be through stumpage, do you have a metric that says in Nova Scotia, per acre or per hectare, this is the return to the province? What is that number and can you compare that to another province like, say, New Brunswick? I'm just trying to determine if the department is looking at - are we getting proper return from our lands in relation to comparison with other provinces? It might not be an absolute comparison, but I'm just wondering, what is the return to the province? What's the metric you use and can you compare that to other jurisdictions?

MR. CHAIRMAN: Mr. Dunn.

MR. FRANK DUNN: I can answer some of the member's questions. First of all, I guess it might be important to talk a little bit about stumpage itself. The stumpage rates that we have in Nova Scotia are based on private transactions. One of the things that we're conscious of is our stumpage rates on Crown land need to be consistent with private land transactions. It's one of the reasons why the province has been able to have a Maritime exclusion when it comes to a softwood lumber agreement with the United States.

When I say a Maritime exclusion, it also includes New Brunswick. The way we go about setting stumpage is through a survey mechanism of private land.

MR. HOUSTON: Is that done every year? Once a year?

MR. FRANK DUNN: I wouldn't say it's done every year but it's done fairly regularly, and we're actually in the process of doing a survey this year as well. I can tell you that on the actual revenue for stumpage, in 2015-16 we had a budget of \$8.8 million in stumpage. Our forecast is that we will achieve the full \$8.8 million.

With regard to your question around how much per acre - I believe that was the question - I don't have that number, I don't know if . . .

MR. HOUSTON: Just any metric you have, like \$8.8 million is just a number until you put it in comparison to another number so can you compare it to New Brunswick?

MR. EDDY: The real challenge in this and we get asked these kinds of questions often, as you can appreciate, is that one piece of forest land is not the same as another piece of forest land. So if you are getting a rent per acre or a rent per hectare, then you'd have a

direct comparison. Really what you have to look at is what your return is per ton or cubic metre. In that case our stumpage rates are equal to or higher than New Brunswick.

MR. HOUSTON: Okay. I do want to talk about biomass - I guess I'm running a little behind in time here - how many biomass plants are there in the province?

MR. FRANK DUNN: There's a biomass plant in Port Hawkesbury, which is near or attached to Port Hawkesbury Paper, that's one, and Brooklyn Power on the South Shore has a biomass plant. I believe there are two hospitals along the South Shore which use biomass to generate electricity and the Dalhousie Campus in Truro consumes biomass.

MR. HOUSTON: And the one in Port Hawkesbury is by far the largest, is that fair?

MR. FRANK DUNN: That would be correct.

MR. HOUSTON: How many tons a year would they burn at that biomass plant?

MR. FRANK DUNN: I have a number for 2014, which would be the last number that we have - just in excess of 530,000 green metric tons.

MR. HOUSTON: Do you know how much of that would come from the waste from the process that's next door to that plant and how much would come from wood that's harvested?

MR. FRANK DUNN: About 45 per cent of that amount would come from primary forest products, about 45 per cent from residuals from sawmills - so chips, sawdust, bark, that type of thing - and about 10 per cent of it comes from outside the province.

MR. HOUSTON: If I have a woodlot and I do some harvesting on it and I say I want to burn this, I'm going to sell this to the biomass and I put it in a truck, can I roll up to the biomass plant in Port Hawkesbury and sell my wood?

MR. EDDY: Probably not in that manner. Like any business, they have supply arrangements to make sure they have a consistent supply. To the best of my knowledge, they don't buy what would be referred to as gate wood - in other words, any truck will buy it because as a utility, of course, they have to have a consistent supply, they need to know where that is coming from so they have supply agreements with a number of contractors. However, if you, as a woodlot owner, had some product that you wanted to sell as biomass, I think the market is pretty active and you would likely be able to do that through one of the contractors that have supply agreements.

MR. HOUSTON: So is it multiple contractors or are there only a couple of parties that can sell biomass?

8

MR. EDDY: My understanding is that there are two major suppliers to Nova Scotia Power. Of course, again, those are commercial agreements confidential to them. In general, the understanding is there are two major suppliers and each of those suppliers have a whole host of independent contractors working for them to do it.

MR. HOUSTON: Does the department monitor - I guess the department doesn't have any way to really monitor what's turning up there to be burned as biomass.

MR. EDDY: Nova Scotia Power is required to report to the Department of Energy what they're taking in and where they're sourcing their fuel, so whether it's coming from private land, Crown land, primary or secondary sources, whether it's coming from outside the province, or inside the province.

MR. HOUSTON: So people are concerned that good wood is being burned for biomass. It seems to me that's a valid concern. If you go out in the woods and people are harvesting and chipping on site, what mechanism is there to look at what has actually been chipped? What do you say to those people who say good wood is being burned?

MR. EDDY: I would say to them that the economic rationale for that really doesn't hold. Like in any large operation, is there some slippage? Probably there is. But if you think about it - and we hear this all the time, there are high-quality hardwood logs going to the biomass - well a high-quality hardwood log could fetch as much as \$300 as a hardwood log. It might fetch \$15 as biomass. So you'd have to ask yourself how many Nova Scotians, on a consistent basis or at any volume, would give up that kind of value?

Occasionally in all of it, there is only one log and it would be worth \$300 if you could get it somewhere, but it might cost you \$450 to get it there. That wouldn't make economic sense. Generally speaking, the economic realities are such that it's very unlikely that any high amount of quality wood would go that way. Again, Nova Scotia Power is required to do monitoring. They have done that. We do it on Crown land. Port Hawkesbury Paper does it for any wood that they're supplying . . .

MR. HOUSTON: What is the monitoring you do on the Crown land? You actually go on site to where they're chipping logs?

MR. EDDY: That's right.

MR. HOUSTON: How many inspections would you do a year, would you say?

MR. EDDY: I don't have those particular numbers, but we can certainly get them if you're interested in them.

MR. HOUSTON: How many inspectors would be on staff?

MR. EDDY: I'm going to try to figure this out quickly, but let's say we probably have several hundred across the province because of course all our staff multi-task and so we would have that many foresters and technicians available to us to complete that work as required.

MR. HOUSTON: I guess the thing is, the concern seems very real to me. If we think about value-add to the forests for the province as a whole - how much of the forest is hardwood, 10 per cent? It wouldn't take much slippage to bring that down to 7 per cent and then that could squeeze the whole supply.

If I drive through the woods, I could see acres and acres of weed trees, and I'm just wondering why - that was kind of the intent to the biomass when it started; that's the stuff that would be burned. I just don't know if the system is operating as it is supposed to. Would it be your position that it is?

MR. EDDY: I would say that our observation would be that there is no significant amount of quality wood - and wood that could go to higher purposes - going to the biomass plant. With the various reports we've seen from interacting with Nova Scotia Power, the Department of Energy, and the contractors - as well as what we see on Crown land - we're very comfortable that there is virtually no high-quality wood, other than the inevitable slippage that's involved in any large scale operation.

MR. HOUSTON: Have you heard or seen or has it been reported of using bunker fuel at the biomass plant to make the chips burn faster? One of the things I've been hearing in numerous places is that the chips aren't burning as good as they need them to and they have to add bunker fuel. Is that a normal part of the process?

MR. EDDY: I really can't comment on that one way or another because that's not part of the work that we do. I can only tell you that's not something I've heard of. What I do know is that the biomass plant itself is not set up to burn Bunker C.

MR. HOUSTON: How am I doing, Mr. Chairman?

MR. CHAIRMAN: You have about one minute left.

MR. HOUSTON: In terms of biomass material that came off Crown land, do you have a number as to how much biomass material was sold off Crown land and what the return to the province was from that?

MR. FRANK DUNN: I can give you a number for the Port Hawkesbury plant, which would be the largest plant, it's about 15 per cent.

MR. HOUSTON: Fifteen per cent of the \$8.8 million?

MR. FRANK DUNN: Well the green metric tons that we're talking about here for the Port Hawkesbury plant were just over 530 green metric tons, so about 15 per cent of that is Crown.

MR. HOUSTON: Okay, so of the 530 that's burned in Port Hawkesbury, I think 45 per cent comes from residual from the process, 15 per cent of that comes from Crown land harvesting, I guess, and then another 40 per cent comes . . .

MR. CHAIRMAN: Order, time has expired. We'll move to the NDP caucus and Mr. Belliveau.

HON. STERLING BELLIVEAU: With the presenters I agree wholeheartedly with the Auditor General and your comments about the forestry is a big part of Nova Scotia's economy and I want to go on record. However, my caucus and myself continue to receive complaints from individuals and groups about the government's approach to develop any plan for the former Bowater lands. The main criticism we are hearing is that there have been inadequate consultations, engagement with citizens, very little collaborative stewardship or working together. Constituents are complaining that there is a top-down approach when it comes to developing a plan for the future use of the former Bowater lands.

My initial question I guess is, what is your department's view on this particular issue?

MR. FRANK DUNN: I guess I would respectfully disagree that there hasn't been adequate consultation on the development of the western Crown land, as we describe it now, previously the Bowater lands. There was extensive consultation when the land was purchased from Bowater, I believe a series of numerous community meetings, I believe nine in total right across that area, lots of feedback and consultation around what the land should be used for. Those conversations and collaborations were used to establish whether the different areas of those lands would be resource management, whether they would be multi-use, whether they would be used for recreational purposes. All those discussions would have been used to build in the conceptual plan as we move forward.

MR. BELLIVEAU: We had the opportunity to be in the government's position and I can assure you from my point of view that those lands, Bowater lands, were purchased for two reasons: for recreational use or access to the public, and also for access for commercial use. To me there has really been a struggle for the community to understand why these parcels of lands - basically the gates are still up.

I raise this question in this Chamber, and I think I'm being very polite here, but there's an individual, Mr. Jon Porter, who is executive to the minister in your department - and I've raised this in a public forum - that the perception from the public's point of view is that there's a conflict of interest. The minister of the time has produced a letter saying that Mr. Porter is not in conflict because he has removed himself from that process.

I raise through you, Mr. Chairman, that when I've gone to these community meetings within the last year and engage with the public, Mr. Porter is present. I ask through you, Mr. Chairman, has he removed himself from a possible conflict of interest?

MR. FRANK DUNN: I would like to respond to that, Mr. Chairman. Whenever employees of mine, their functions are questioned - I don't believe that Mr. Porter has a conflict of interest. I would suggest that the Bowater lands are often held up as the gem of Crown land. What critics do not remind us is that Mr. Porter was responsible for managing those lands for many years, so I would suggest he's not in a conflict.

MR. EDDY: I guess I would just point out in reference to the public meetings on this, I think perhaps you're referring to the meetings that were held this Fall around the Medway lands when we're talking about the gates. I think it's important to understand that the issue is that Mr. Porter has a small piece of private property and it's not in that block. In fact, it's on the Rossignol block, and the reason the gates are still closed on the Rossignol block is that the Crown, honouring its duties, is in consultation with the Mi'kmaq folks about some concerns they have about opening that up.

That Mr. Porter participated in meetings where he has no conflict at all, I don't think should be surprising. I think it's important to understand that the reason those gates are still closed is because we're in consultation - as is our duty - with the Aboriginal community.

MR. BELLIVEAU: I recognize the member opposite's acknowledgement of Mr. Porter owning private land in one of the parcels of land, and we're dealing with perception here. The public is irritated by what has been described here in the last few minutes. So I'll move on.

I know that one of the main issues that I have raised in my critic area is the access to wood fibre for commercial use. I know earlier you talked about a tendering process. To me, when I look at these commercial contractors that have great knowledge of the forestry - and we raised the question in this Chamber saying the commercial users of firewood need more access. The minister stands and reassures this House that there's a tendering process, and there are probably 10, 15 or 20 parcels of land that are out there for the scrutiny of the commercial users.

When you do your homework and you talk with these professionals who have literally been in the woods since they were children, they say basically that this tendering process is a waste of time because it's going to cost them more to put a road in there. The other part is that this is basically wasteland. Those are their words. They do not fill out an application for the tendering. So there's a flawed process there. Are these contractors wrong or is there a better way of addressing the inadequate access to wood fibre?

MR. FRANK DUNN: There are a couple of comments I want to make. I want to go back, just for the record for the committee, on the previous question where the member

- I thought he was talking about the land mass in general. I can tell him specifically around the issue of the private land that's owned by Mr. Porter that he did approach me early on in his tenure and advised me that he had a piece of private land and that after discussion with me, we agreed that if there were discussions, particularly around gates, which were close to his private land or any other forestry discussions, that he would excuse himself from those discussions. I believe he has done that.

With regard to access to firewood and complaints from contractors, I don't know the specifics around particular complaints. I can tell you that we have tendered blocks of land along the South Shore. Last year and again this year we've also tendered some blocks in the Valley. In some cases there were successful bidders and in other cases there were no bidders on the sites. The reasons for that could be multiple.

The member talked about forest access issues, it would be great if the department had the fiscal capacity to build forestry roads to gain access to fibre wherever we wanted. The reality is that like all departments, we are under certain fiscal constraints and we do what we believe to be based on priority.

As far as whether the harvest plots that were put up for tender being described as wastelands, I guess my position on this is that if my staff have done a review of particular harvest areas and they believe there is a supply of hardwood which is economically viable, that those would be the sites they would put forward for tender.

MR. BELLIVEAU: What I'm trying to point out here is that the contractors and the individuals have pointed to a flawed system of basically what we're trying to describe here now. What I'm trying to get from the presenters is that this probably needs to be visited and reviewed. I'll continue on that theme about a permitting system.

My understanding now is the private contractors who want access to wood fibre for firewood have to go through a permitting system, they have to get permission. The permit is issued to a large mill that has the authority to go on and harvest on Crown land and that individual approval would go from a mill to the individual contractor. Something I've learned in this Chamber is that these large contractors who deliver firewood for people across Nova Scotia are simply that - large companies, 1,000 or 2,000 to 3,000 or 5,000 cords of wood a year. That really has got my attention. These individuals are basically at the discretion of a large mill, saying I can pick A, B and C company but excuse me, that's all we're going to have for this turn.

I sense that is a flawed system. My understanding is that can be revisited. Does an individual who harvests this large amount of wood - shouldn't they be looked at in a different light?

MR. EDDY: Interesting construct. I think it's important to understand, first of all, that when we're talking about this access to fibre, as we said earlier, 70 per cent to 80 per cent of all fibre that flows in this province is coming from private land. Fully 50 per cent

of that private land is in small holdings and certainly all of that land is open to commercial competition amongst the companies, the various contractors and doing it.

In terms of Crown land, again I think back in October 2014 the minister made longterm allocations at that point in time to 16 different mills in the province. What was very interesting at that point in time is that probably for about four or five of those mills it was the first time they ever had access to Crown land and those were some of the smaller mills.

Again, there are supply arrangements - it becomes a commercial arrangement amongst the mill that has an allocation and who they get to achieve that allocation for them. I'm not sure that it would be wise for the government to get in the middle of everybody's business and dictate which companies should do the work. What we do dictate is the standards to which the work must be accomplished. They have to meet Crown land standards, from occupational health and safety, through to labour standards, to environmental standards.

Often some of the small contractors find that difficult, we would acknowledge that, but I think in a modern society we can't afford to relax occupational health and safety or environmental standards. Those are the standards that the government sets in the system. It then becomes a commercial transaction between those who have the allocation to support their mills and how they go about having that harvested for them, which in general to your point is through a whole series of independent contractors.

MR. BELLIVEAU: I do appreciate that these are large contractors and I really believe that - not to dwell on this but, there is a need to establish a line somewhere that wood fibre for firewood is a necessity for the public of Nova Scotia. Through a clumsy permitting system you can see where things can happen where some of these contractors may not have access. I'm just trying to get that recognized by the present government.

Also, to continue on that theme - when we have flooring companies, my colleague earlier identified as a company wants that perfect piece of hardwood log, that is something that the Department of Natural Resources need to direct that supply towards those certain needs. I'll take it a step further - it's like the flooring company - when you see those individual companies go out of work because they don't have access to fibre, that's the point. That is the point about addressing the purchase of Bowater's land is to identify recreational use and for commercial access to fibre.

I'll put that back to you. Are we addressing the needs of individual companies such as flooring companies or wood fibre?

MR. EDDY: I would have to say that I am unaware of any flooring companies in close proximity to those Bowater lands. I think the companies that were alluded to earlier - one was around the Antigonish area and the other one was up in Cape Breton. Granted, wood is transported all over this province, but because of the size of their operations and

14

the economic pieces of it, their traditional supply would only have been a small piece from there.

Again I go back to the point that 70 to 80 per cent of all supply in this province comes from private lands. Under legislation, the minister has a responsibility to ensure the primary source of supply in the province is, in fact, from private land. So if a company is having challenges, yes, the Crown does what it can to work with it because we're very concerned about the overall economic activity. But I think one can concede if you're having problems with 80 per cent of your supply, the 20 per cent is probably not going to be the saviour.

MR. BELLIVEAU: I just want to move on. The Medway district is home to some of the oldest forest lands and some of the most intact forest that has been purchased from Bowater. When the minister announced the government was dropping the Forest Stewardship Council (FSC) certification for Medway in late February, he said it was on the basis of "duplication in certification".

However, while the other certification - the Sustainable Forestry Initiative certification - may have its merits, it has been criticized as being less stringent for sustainable forest activities. It has been criticized in the past and the previous Liberal Minister of Natural Resources, the member for Yarmouth, called the FSC a gold standard. So if one minister has dropped it and the other one has called it a gold standard, where are we now? What is it?

MR. FRANK DUNN: First of all, I will talk about the process. We did relinquish the FSC certification in the Medway lands and it was around duplication of effort. There were two certifications on that land, FSC and SFI. I think it's important for the members to realize or know that although the FSC certification has been dropped, the forest management plan that was established under that certification will continue. For us it's about duplication and reducing red tape but, at the same time, what is most important is what's happening on the land and the forest management plan that was put in place will continue.

With regard to criticism that I've heard around the SFI certification, I can tell you that nationally if you look at trends across the country, acceptance of SFI continues to grow and the acceptance of FSC continues to decline. I think it's also important to note that the Province of Nova Scotia was the only province in the country that actually held an FSC certification on Crown land and it just goes to show the extra duplication and effort there.

I might also add on the SFI . . .

MR. CHAIRMAN: Order, I do apologize. I've let it go a little bit over there. We'll have to move to the Liberal caucus, and Mr. Rankin.

MR. IAIN RANKIN: I guess I have to say that I'm pretty empathetic to the kind of trepidatious sentiment from people surrounding the biomass operations so I'll just continue around the same line in questioning that my colleague from Pictou East had.

I was going to ask about the percentage of residual product too; I think that's kind of what the public has the most anxiety about. You say it's 45 per cent. I believe the commitment was that it was going to be all residual or, if not all, the vast majority of product entering into the biomass plant would be so-called waste and ostensibly maybe green energy.

Maybe you can comment - what was the commitment back in whatever year it was? Does the department see this product as green energy? I know the State of Maine has recently said it's not.

MR. EDDY: Relative to the commitment, I think at the time my understanding was that the biomass plant was sort of under active conversation and development in terms of the regulatory processes and government policy back as far as 2008. As those conversations matured, the department had been asked to calculate what they felt was a sustainable amount of biomass that could be produced off Crown lands. I think the number that was put forward was 500,000 oven-dried tons or one million green tons.

Using the precautionary principle, I think the minister of the day, or at least the government of the day, ratcheted that back to 350,000 oven-dried tons or 700,000 green metric tons. Green metric tons, of course, being the wood as it is cut at the stump.

I think that from a regulatory perspective it was put in place that said that no more than that amount, no more facilities should be allowed to be created than would consume that amount of primary forest biomass. There was an expectation that up to 700,000 green metric tons of primary forest biomass could be consumed to do that.

Relative to your question about whether it's green energy or not, I would have to defer to my colleagues at Energy as we are the forestry managers and they are the energy managers.

MR. RANKIN: Is there any truth to the fact that the operation needs critical volume for the machinery to continue to go? Is that part of the reason why they need more than just the waste, that they don't have the volume of waste required to operate it?

MR. EDDY: I think what you're referring to is the must-run designation?

MR. RANKIN: Yes.

MR. EDDY: Again I'm going to step briefly into the area of my colleagues in the Department of Energy. The way the utility operates is what is referred to as economic dispatch. So as the demand for power comes on, the first plant they'll bring on is their most

16

economic producer and they just keep going through the fleet to meet the demand. That's that concept.

For various reasons, some plants within the fleet are designated must-run, which means that they form the base load, irrespective of their economic competition to one of their sister plants - they would start first. In this case, the Port Hawkesbury plant was designated as must-run. My understanding is that has some connection to the fact that it's what would be referred to as a firm renewable.

You will recall that the previous governments had set targets for green energy. At the time, a lot of it was to be achieved through wind power. The challenge with wind power, of course, is it's there when the wind is blowing and you either use it or you don't use it. Essentially, it's practically not possible to store it at this point in time in any kind of quantity and then dispatch it later. Therefore if you had to have a certain amount of green power available and wanted to make that part of your base load, you have to have a dispatchable or firm green power, and of course the biomass plant - like a gas plant or coal plant - can go up or down as you require it. So I believe that's the fundamentals behind it.

MR. RANKIN: So presumably to reach the same green energy percentage, if we had other sources, then we wouldn't need that from a biomass plant, if this government wanted to go in that direction.

MR. EDDY: Again, I think that is something that we would have to address to the Department of Energy because it's just not my area of expertise.

MR. RANKIN: The numbers break down as 530,000 green tons, I think was the term. So 45 per cent of that would be the waste. Would that mean that the 55 per cent would be a combination of softwood, hardwood - what would be the rest of the 55 per cent?

MR. FRANK DUNN: So 45 per cent would be the residuals from sawmills, so chips, bark, sawdust; 45 per cent would be primary fibre; and the remaining 10 per cent would be fibre that would have been delivered out of province.

MR. RANKIN: That's roughly 270,000 that's primary forest. Of that, how much would be hardwood? Are we able to discern - is it 10 per cent hardwood? Is there any way that we monitor that?

MR. EDDY: We don't have those numbers with us today. Again, we could retrieve them if that was of interest. It's part of the larger reporting that Nova Scotia Power is required to do with the Department of Energy. I would have to say at this moment in time I can't say specifically whether they separate it out in hardwood or softwood or whether it's just primary and secondary. MR. RANKIN: I guess that is the concern, not even from only an environmental standpoint - it's the economics of possibly having high-quality hardwood going into the system.

So I just want to understand the economics before I move on to one of my colleagues. If a private operator - you said 80 per cent of the fibre comes from private - what is the impetus for them to sell for firewood? How do the numbers match up? Do they get a better return by going to the biomass plant or are they in the market to ensure that people have access to firewood if they have high-quality wood?

MR. FRANK DUNN: Perhaps I can start and Mr. Eddy can give the specific numbers. We look at this issue from a market driven perspective and the market should drive where fibre in general goes. I believe Mr. Eddy mentioned earlier that the desire from private woodlot owners, who I think we're talking about here primarily, will be to sell their fibre at the highest price that they can get, and you can get more for firewood than you can for biomass. So if you allow the market to drive the process, private landowners should sell the material that can be firewood as firewood.

To Mr. Eddy's point earlier, no system is perfect. It comes down to economics and you may get a piece of hardwood in a shipment for biomass that, all things being equal, could be used for firewood. But the cost to segregate that one piece would cost you more than actually selling it as firewood.

With regard to the specific numbers around economics - Mr. Eddy?

MR. EDDY: Again, this is all transactional based. Where is the wood and how far - to MLA Belliveau's point - do you have to build a road to get to it and all those other things affect what somebody gets from it.

I think most folks have their own experience of, you've purchased firewood or your neighbours do and you know that it goes for a pretty strong price these days, particularly in the last couple of years that price has been coming up. Generally speaking, biomass is being sold at somewhere between \$50 and \$60 a ton and those are the top ends, delivered. That's after somebody having to cut it, bring it to roadside, put it on a truck, drive it all the way to whatever plant, offload it and do those things. So when you put that in comparison, I think that a cord of hardwood in Halifax today, cut and split and landed in your driveway is probably between \$250 and \$300. You can see that there's probably a fairly strong economic driver to put wood that can go that way to firewood, as opposed to sending it off to the biomass plant.

MR. CHAIRMAN: Mr. Stroink.

MR. JOACHIM STROINK: Thank you very much for your presentation. My colleague here took most of my questions on biomass so I'll move forward into some other

stuff. I guess a big question for me is that once the cutting has occurred, based on your process - maybe you can walk us through a bit of that.

A lot of science is put forward into clear-cutting but also into reforestation of a clear-cut. If you can just walk me though a bit of that because I think that's fundamentally important for people to understand that it's not a matter of harvesters going into a land and just cutting and stripping it clean. There is a misconception that that's what happening, which it is not. If you could walk us through that.

MR. EDDY: Indeed, there's a lot of misconception around how that happens. I think it's important, as Deputy Dunn pointed out earlier, on Crown land every harvest is preceded by a pre-treatment assessment. Those are people who are trained to go out and examine the general land mass, where is it in terms of exposure to wind and weather. They look at the soil types, they look at the rooting depth, they look at the moisture regime onsite, they look at the plant communities and through our ecological land classification system, understand what's the larger sort of succession or progression that stand would normally go in a natural process.

All of that formulates the harvest prescription, part of which is an understanding of whether there is advanced regeneration onsite, so if there are seedlings or saplings already there that need to be protected, whether or not that's a site that would likely - again, because of soil type, its proximity.

There was some conversation about the Bowater lands. In particular we know St. Margaret's Bay has some of the best regenerating land in Nova Scotia to red spruce. That's largely a result of the climate in that area where the fog produces a lot of moisture and it's good for regeneration. All that is taken into consideration before the harvest even begins.

Once the harvest is completed on Crown land, all areas that are harvested are required to be surveyed two years after harvest, to determine whether they are adequately regenerated to commercial species. If that survey demonstrates that it's not the case, then planting will follow.

MR. STROINK: I guess following that and I guess what a lot of people are seeing in the media - not in the media but online - is the stripping of land. That does not occur on Crown land, right? That's private land, that's not happening within our purview, is that correct?

MR. EDDY: Definitely we can say that stripping on Crown land does not happen if it's a forest harvesting. It's possible that mineral rights have been obtained and that a mine is being developed. Then I think everybody would recognize the nature of that activity would lead you to a situation that is different than if you were trying to do a forestry operation and regenerate it. Again I think that a lot of the things that we see online, the beauty of online is it gives you instant access but you never really know what you are seeing. We know that back to many of the questions around biomass, there has been a lot of concern about the nature of some of that harvesting. What a lot of folks don't see is that at the same time there has been kind of an uptake in the agriculture sector around blueberries and beef. In Nova Scotia many of our farmers are taking advantage of that uptake to expand their production. In many cases what they are doing is taking what was agricultural land, which because of the economics of whatever they were involved in, or previous owners of that farm, had been allowed to start to come back into forest condition and they're just simply reverting it back to an agricultural use.

Obviously, if you're taking an area that has trees on it and your intention is to turn it either into blueberry land or to pasture to support a beef operation, the nature of that harvest is completely different than it would be if you're going to do other things. Unfortunately all people see is what they recognize as a forestry machine in there doing some kind of work and they assume that the outcome must be intended as forestry. In many cases, it's actually a change of land use or a river, and in the agriculture case just reverting to type.

MR. STROINK: I just want to change course direction a bit to what some people in my constituency are talking about. You alluded to it at the end of your speech on the good news of parks and how they're being more utilized here in Nova Scotia. I guess that's music to my ears in the sense that more people are enjoying our Nova Scotia wilderness -Crown land, parks, and all that kind of stuff. What are you attributing that to because it seems like with those numbers that you shared is a very large increase in park usage?

MR. FRANK DUNN: What's causing that?

MR. STROINK: Yes, what's causing those increases?

MR. FRANK DUNN: There are a couple of things. First of all, I think it would be helpful for the committee members to realize that the department realizes that we're at a bit of a turning point when it comes to our park system and particularly our camping parks in the province. It's not something that's unique to us. It's an issue that is right across the country and I think a lot of it has to do with the change in societal values when it comes to the use of camping parks and the technology age. Young families are less likely to attend or go to a camping park than they might have 20 or 30 years ago.

Specifically to the uptake this year, I think there are a couple of reasons. Our philosophy around our park system is that, considering the fiscal realities of where we are, we will concentrate on our existing park system. We have some aging infrastructure we need to upgrade and put money into that system, and then we need to market our parks in a better way.

With regard to opening day this year, I would suggest two things. One, the winter we had last year - in April there was still in some areas of the province several feet of snow on the ground. I don't think for a lot of people the minds had turned to getting ready to go camping in the summer.

One thing we did this year though that has been a little different than normal - and I talked a little bit about marketing the park system - the Department of Natural Resources actually attended the RV show this year for the first time in a good many years and began to market the parks. So those would be two reasons to explain the uptake this year.

MR. STROINK: I guess one of the things I also want to touch base on are the selfservice parks. I think that was one of the best things that we've done for this province because it creates a new experience for campers. If you look throughout North America, the self-serve park system is very prevalent, very successful. I guess that's where, as someone who enjoys parks, that's where I would tend to go. Do you have any sense of how that's unfolding as the year goes by?

MR. FRANK DUNN: Whenever there is change to a process or an infrastructure that has been around for a long time, there is some apprehension from some people. Last year during the budget we converted seven parks to self-registration. I can tell you that the major concerns that were expressed - and they were expressed in two of the seven parks - one was in the Porters Lake park and the other was in the chairman's riding in Whycocomagh. We actually made a conscious effort to go out and talk to the communities of those particular parks and address their concerns.

I can tell you that of the seven registration parks last year that overall occupancy year over year remained the same. One of the major concerns individuals who expressed concern about the change had around was security, a belief that there would be no one in the parks. That was not the case. It was just simply that the registration process would come online.

To address concerns that some citizens had, last year working with the Department of Environment, we had our enforcement officers, conservation officers, increase patrols of parks. I can tell you that there was very little concern or instances that would require an enforcement officer. So overall, the self-registration initiative has been successful.

MR. CHAIRMAN: Order, we have to move back to the PC caucus, Mr. Houston.

MR. HOUSTON: At the end of our first discussion you mentioned that the province supplies 15 per cent of the biomass from Crown land. Do you have a number? What does that mean dollar-wise back to the treasury of the province? If you don't have it at hand today, maybe you could get it.

MR. FRANK DUNN: I can get it for you, I don't have it right now.

MR. HOUSTON: But it would be a portion of the \$8.8 million that you referred to as stumpage? Okay, that's fine.

MR. FRANK DUNN: When I was speaking about the 15 per cent, it was specific to the Port Hawkesbury plant. It would be 15 per cent of the 530,000-some odd green metric tons.

MR. HOUSTON: Maybe we can get the dollar value of revenue to the province from selling biomass off Crown land. That would include Port Hawkesbury but it might include some of the other biomass plants you referred to.

MR. FRANK DUNN: We can get that for you.

MR. HOUSTON: I do want to talk about silviculture. Now there's a silviculture fund that the province administers, I guess. What's the value of that fund?

MR. FRANK DUNN: Just bear with me for a second. There are actually two funds. We have a Crown land silviculture fund and we also have a private land silviculture fund. I can tell you that the budget for Crown land in 2015-16 was \$4.3 million and the amount of private land silviculture would be \$4.1 million.

MR. HOUSTON: Now those funds have been in existence for a number of years, I guess. There has been little change in the structure of how it is done?

MR. FRANK DUNN: Correct.

MR. HOUSTON: And the value of those funds, has that remained pretty constant as well?

MR. FRANK DUNN: The value of the funds actually have increased, particularly on the Crown land side, with the purchase of the Bowater lands in the western region. So there was an addition to the department budget in 2014-15 for silviculture on the western lands

MR. HOUSTON: Is there any relationship between the stumpage returns to the province and what goes into this fund? Is it like, we always put 50 per cent back into silviculture, or is it always just kind of an annual allotment?

MR. EDDY: I don't think at this point in time there's a direct correlation between those two things. Again, I think this is the interesting thing about the ecosystem approach to forestry - you do what the land requires. There were questions earlier, I think, about how we go about reforesting on Crown land. There are a lot of folks who believe that if you cut a tree, you absolutely have to plant a tree. That's a good conservation ethic in general, but I think it has to be tempered by the reality of the area you're in. So there are some areas that if you don't plant a tree, you absolutely won't have any trees. One of the things about Nova Scotia is we are blessed with an awful lot of natural regeneration, and so what we've found over time is that in some cases we were planting trees that really weren't contributing to anything other than . . .

MR. HOUSTON: Okay, I just want to focus on the funds and then we can come to that. In terms of the - like a lot of people who work in silviculture would say to me our rates haven't been increased in however many years. We're talking about the value of the fund, and the private fund, if we focus on that, is \$4.1 million. But then in terms of how that's distributed, has the rate sheet for different types of work - whether it's spacing or thinning or whatever the case may be - has that changed or has that been constant for a number of years?

MR. EDDY: There have been some changes. I think it's important to understand that the Crown - again, we come back to that we're the minority player in the land base in most of those activities and so we need to be reflective of the market that's out there.

MR. HOUSTON: You referred to two different silviculture funds, which would total \$8.4 million and that's going to be done. That's silviculture work that will be done in the province. Do you have any guess as to the total value of silviculture work that's done in the province? Is it mostly funded by these funds?

MR. EDDY: I think if we go back and look we'll find that the silviculture expenditures over the last three or four years probably average between \$14 million and \$16 million.

One of the other important sources of silviculture investment is through the Forest Sustainability Regulations and the Registry of Buyers. What that requires is that anybody that is acquiring - and I'll focus on softwood for now - more than 5,000 cubic metres in a year is required to either contribute or have the equivalent work completed to the equivalent of \$3 per cubic metre that they've acquired.

MR. HOUSTON: Is that assessment included in this \$8.4 million? It's in addition to, is it?

MR. EDDY: I don't believe it is. Deputy Dunn is telling me . . .

MR. HOUSTON: Do you have a number as to how much that is? There are two funds - \$4.3 million and \$4.1 million - and let's call it fund three, I guess, just for purposes here. Is the assessment on harvesting at \$3 per ton?

MR. EDDY: That's correct. I think again if those two funds are in the order of \$8 million, I think I indicated earlier that the total expenditure is somewhere between \$14 million and \$16 million averaging out so that other fund would be in the order of somewhere between \$6 million and \$8 million, depending on the purchases that are occurring...

MR. HOUSTON: That's kind of what I was trying to get at. So private woodlot owners, to the extent that they're doing silviculture - they're not usually just dipping into their pocket and writing a cheque to somebody. They're usually accessing - and under your scenario that would be exclusively only if they had assistance through these mechanisms. Is that the case?

MR. EDDY: I think that traditionally silviculture investments aren't things that private landowners generally fund from their own sources simply because it's such a long-term investment. If you're a landowner today and you're 60 years old and you're investing your dollars, the wood is going to be harvested by somebody else for somebody else's benefit. So generally, certainly since the mid-1970s, silviculture investments in Nova Scotia have largely been a function of public and industry funding.

MR. HOUSTON: In terms of the Crown land fund - the \$4.3 million - that all goes into the Crown lands, and the \$4.1 million, that's available to private woodlot owners, which would make up 65 per cent.

MR. EDDY: Some portion of that, yes.

MR. HOUSTON: So \$4.1 million - if I'm a private woodlot owner and I want to get some silviculture work done, do I fill out an application to try to get some money from this fund?

MR. EDDY: As a private owner, there are probably two major sources of funding that you would work through. One is the Association for Sustainable Forestry, which is a third-party organization that the department flows silviculture funds through.

MR. HOUSTON: How much of the \$4.1 million would go through them?

MR. FRANK DUNN: Last year, \$2.2 million.

MR. HOUSTON: So does the department itself receive - I assume this \$4.1 million is always fully subscribed and probably over-subscribed. So I'm just wondering how - I've heard people say that they had to drive to Truro to get in line on the day that the allotments come out, and they get there at four o'clock in the morning and they're already lined up around the block so there's no silviculture funding for them.

I'm just wondering if there's truth to that, and what the actual mechanism is for distributing those private funds to private woodlot owners from that fund.

MR. EDDY: I guess I can't comment as to if there's any truth to it or not, not having been there. I wouldn't doubt that there are people who go to concerts and want to be there the night before and all those other things. It definitely is sort of a first-come, first-served system where people put it in. There are some buckets of funds, if you will, that that \$2.2 million would be subdivided, there would be so much available for a pre-commercial thinning, so much available for commercial thinning, planting, et cetera. So depending which treatment type you were seeking assistance on, you would have more or less competition for the available funding.

MR. HOUSTON: And on what day does this funding kind of open up? What day do the concert ticket sales go on?

MR. EDDY: I believe it's an annual piece. I could say to you that I'm unaware that there was ever a case when the fund would have been fully subscribed in the first day or the first couple of days. It's not that level of piece.

There are some of the other programs that have come out over time around road assistance where there's limited funds and they were subscribed quite quickly. But in general, silviculture funding is sort of doled out over the year.

MR. HOUSTON: Is it doled out to the landowners or would it be doled out to the contractors who then, as they do their work over the course of the year, dole out what they've been able to secure?

MR. EDDY: I think it's a combination. Again, I think it's fair to say that the contractors who are in the business and understand the system very well, that's their employment and others that they employ have a vested interest in making sure that they have some funding. Generally what they do is they work with landowners and they apply on their behalf. So instead of every individual landowner having to apply, it makes the system a lot more efficient if you have a subset of forestry businesses that are supplying those landowners that silviculture service, who do the majority of the applications.

MR. HOUSTON: In your experience, is there enough silviculture work being done in the province?

MR. EDDY: I guess the question is, how do we define enough? If it is whether there is enough going on that everybody who would have some interest in having it done and completed, I would say the funding is not sufficient for that.

Is there enough silviculture being done that as we model all those things and that the outcome of that silviculture means that we can support the sustainable harvest that we're projecting, I would say yes.

MR. HOUSTON: And you would also say that on the Crown lands?

MR. EDDY: Yes.

MR. HOUSTON: Even more definitively on the Crown lands?

MR. EDDY: Yes, absolutely.

MR. HOUSTON: I think somebody mentioned about getting access to money for roads and stuff like that, would that come out of the silviculture fund if you wanted to improve a woods road?

MR. FRANK DUNN: There's actually another fund - I believe it \$720,000 a year which Forest Nova Scotia would administer for us.

MR. HOUSTON: Okay, so \$720,000. Now what about property lines? I have seen here people talking about lines being overgrown and stuff like that. I think the province at one point, I don't know - it was quite a while ago, maybe in the 1980s or 1990s - actually invested in putting people to work redoing lines. Is that something that is still being done or contemplated?

MR. FRANK DUNN: It is still being done. The boundary line maintenance for Crown land would generally be done by our surveyors, which would be in our regional offices across the province. The dollar amount that I referred to in the silviculture numbers here would not include survey work. A dollar amount for that, I would need to get it for you because it would be salaries for surveyors.

MR. HOUSTON: Is there a fund for private owners to access? There's \$720,000 for roads but would there be a similar amount for assistance getting property lines "blazed", I think is the term?

MR. EDDY: You referred to previous programs and I think that again, through the late 1970s to the mid-1990s, there was a series of federal-provincial forestry programs that were there and under those programs there was, in fact, funding available to support private land boundary line maintenance. To the best of my understanding, since those agreements expired in the mid-1990s, that's not a form of assistance that has been available to private landowners through the department.

MR. HOUSTON: Okay, and I guess . . .

MR. CHAIRMAN: Time has just about expired, unless you have a very quick question.

MR. HOUSTON: I think I'll pass, thank you.

MR. CHAIRMAN: We'll move to the NDP caucus. Mr. Belliveau.

MR. BELLIVEAU: I believe you answered this question earlier but I'll ask it for the record. My question is regarding the revenue that has been accrued by the government last year regarding the result of stumpage fees.

MR. FRANK DUNN: I believe it was \$8.8 million, almost \$8.9 million.

26

MR. BELLIVEAU: My question is, is there new staff that has been hired to address the monitoring of this stumpage? Has there been new staff acquired to address this issue?

MR. FRANK DUNN: I wouldn't say there has been specific staff hired to monitor stumpage. I believe what the committee member may be referring to is the Auditor General's recommendation that in harvesting and licensing operations on Crown land there needed to be a process to be implemented to do that. I guess to not drag out the answer, there hasn't been - there has been regular hiring of staff but I wouldn't say to the member that they were specifically hired to address stumpage. We are very close to implementing a monitoring process on Crown land which will include the amount of harvest that comes off the land. That, in and of itself, indirectly would tell us the type of stumpage that's coming off a piece of Crown land.

MR. BELLIVEAU: So again, to me, \$8.8 million, that's a considerable amount of pocket change. I believe the Auditor General is saying that there's probably room for improvement there. To me, again, that's a considerable amount of money. Do you see that as something worthwhile to improve on that?

MR. FRANK DUNN: Yes, and as I mentioned earlier, we have agreed with all the Auditor General's recommendations. As Mr. Eddy said earlier, not so much that we were not monitoring to ensure that the proper harvest volume was coming off the land and how that indirectly relates to stumpage, it was more about documenting the process.

I can tell the member that the new forest operations inspection and audit program, which we should have in place by July 31st of this year, includes things such as the pretreatment assessment, the amount harvested, the trucking load, what was done with regard to road construction, bridge and culvert installation, and silviculture - to ensure that compliance is followed with the licensee.

MR. BELLIVEAU: Thank you very much. If I could just kind of take you in a different direction. I consider myself an average Nova Scotian as we move into the electronic age and some of us have been there for a considerable amount of time. The Department of Natural Resources has moved to an online mapping system.

My general question is, for the public, do you find that the general public has easy access to this? I know that some people get lost in the maze of electronic mapping. What is your perception of where we're at?

MR. FRANK DUNN: Mr. Chairman, I'm actually quite glad that the member asked this question. He's referring to the harvest mapping process that we currently have on file. It was a request by stakeholders and NGOs to provide that information. I can tell you that the process now is when the harvest map goes online that individuals can be on an email list and be notified of the proposed harvest sites. They have an opportunity to respond. An example would be the site on Scout Island, out in Upper Tantallon. To answer your question, the harvest mapping site is not easy for everyone. The information that is online now is in PDF format - difficult for some to use the information for other purposes. I can tell the committee that within weeks there will be a new system put up online by DNR. It will be a harvest mapping system for the entire province - not simply the western region. Anyone will have access to that site. It will not be PDF files. It will be shapefile, which will allow anyone to use the data in whatever form they so choose. If you click on a particular site, an email will go to both the department and to the licensee of the land and you can request information such as PTAs or treatment assessment information.

This is an example of continually listening to the general public and the department trying to be transparent and collaborative in what we're doing. I think it's a continuous process and the new system, which will go live, will be even better than what we have today.

MR. BELLIVEAU: I'm going to date myself here, but I'm surprised that actually this question hasn't surfaced as of yet today, but there are some current threats to our forestry, and one in particular that my generation is familiar with, the spruce budworm. I hope you appreciate my previous occupation that I don't have the experience that you or your department has regarding that. Are there threats of the spruce budworm resurfacing or are there other threats out there that the public should be aware of?

MR. FRANK DUNN: I guess the best way to describe it to the member is the spruce budworm is coming. There has been infestation in Quebec. It has moved into New Brunswick. We are aware of it. We have started to get ready now. Our best estimate is that the spruce budworm - we're looking at three to five years roughly. We've established a management steering committee, which has representatives from some of the key departments, including Environment and we've been in contact with the Department of Health and Wellness.

We're working closely with the Province of New Brunswick which is undergoing right now a pilot project on various methods to - I'm not going to say to eradicate the spruce budworm, but to knock the population down. They have some federal money to do that. We're actively involved in that.

We've started to reach out to our stakeholders, including Forest Nova Scotia. Conversations will happen with the Mi'kmaq. Yes, it's coming and we anticipate within three to five years, but DNR will be ready when it happens.

MR. BELLIVEAU: I'm glad I got the opportunity to ask that question, but again to my experience, three to five years in the forestry is basically a blink of an eye. I guess my question is, how aggressive is it simply that you have to get out in front of the spruce budworm in order to prevent this from spreading? I want myself and the public to understand the strategy leading up to that plan.

MR. FRANK DUNN: Maybe I'll turn that to Mr. Eddy for the specifics.

MR. EDDY: Excellent concerns and questions, MLA Belliveau. In fact there is a whole new strategy that is being deployed. Deputy Dunn referred to the fact that the federal government has some money in that exercise - I think it's in the order of \$18 million over three years that was supplied and largely is being deployed in Quebec and to some extent in New Brunswick. There is a larger organization that is referred to as the Healthy Forest Partnership and there's a website that you can look at where we are part of that activity.

There are numerous theories, I guess, as to how the spruce budworm population grows. There are historical records that would show that it has showed up here in Nova Scotia on a 30-year to 40-year cycle, going back 200 to 300 years. It has been with us for a long time, it's a natural phenomenon.

One of the questions is - it doesn't just disappear completely and then invade. It is always there to some degree at endemic levels; it's just very difficult to detect at those levels. Then there is something in its population dynamics that allows the population growth to accelerate dramatically and build up. It probably lasts on average six to 10 years and then we're back into a quiet cycle, waiting for the next 30 to 40 years.

One of the things that the federal scientists and ours are working on is the thought that if you can identify and capture those points when the population is first beginning to grow and to supress it at that point - rather than waiting until it is in full bloom, if you will - then perhaps you can keep it from growing into the kinds of problems we've seen in the past. That's the work that's ongoing now, particularly in New Brunswick where they are identifying areas where it is just now at low levels which in the past you would not have taken any kind of suppression activity against because it was too low a level to do it.

They are doing this work with two specific agents to see whether or not the growth of the population can be arrested before it becomes problematic. That's the fundamental strategy, and we're watching and working with them. But at the same time, we're also recognizing that in the advent that that kind of pre-suppression is not possible, that we will be prepared in a more traditional way to protect our forests.

MR. BELLIVEAU: I'm going to move on here. This raises a number of questions - and I want to give credit to our staff for actually giving that question. I'd like to take the full credit for it but I'm aware of our staff research on it. It will be further questions for our budget process and I welcome your comments.

I have only a few minutes left, but in your opening comments you talked about our provincial parks. To me there has been some criticism regarding the phone system and the staffing that has been cut right across Nova Scotia in our provincial parks. The scenario that has been put to me by constituents is, if there's an emergency during early morning hours, what is the process for the individual camper if there's an emergency situation? What happens there, what do they do?

MR. FRANK DUNN: I can start by saying moving to self-registration of parks did not change the number of staff that would have been in the park in what I believe the member described as the early hours. This was a change that instead of registering at a booth when you entered the park, you would do it online.

I would suggest to the member that if there was an emergency in a park in the wee hours of the morning that it would be no different today than it was prior to self-registration. There is a misconception that we staff our parks 24/7 - we do not staff our parks 24/7. We have not for quite a long period of time.

If there was an emergency, the member talked about technology and moving forward in the past. You know - 911 using a cellphone, and I know that in most of our parks we are attempting to have a landline, but technology . . .

MR. CHAIRMAN: Order, please. I do apologize, the time has expired. We'll move back to the Liberal caucus and Mr. Farrell.

MR. TERRY FARRELL: Thank you to our guests for the hard work you're putting into your appearance here today. I just want to ask about the perception that we have an ever-increasing appetite, if you will, for forest products and fibre and that because of biomass and other growth factors that the pressure on our forests is increasing and that there's greater and greater harvesting, and maybe that's something that's resulting in less than ideal forest practices and clear-cutting, and that there's a real issue there and that's an ecological issue and a sustainability issue. Could you comment on that perception because it seems quite prevalent?

MR. FRANK DUNN: I will provide the member with one stat that I found quite fascinating, and then Mr. Eddy, who is an expert, can kind of get into the detail, if you so choose.

The reality is, if you look at the total volume of fibre that was harvested in Nova Scotia a decade ago and compare it to the volume of fibre that is being harvested today, we are down to almost not quite half of what the fibre was harvested a decade ago.

I guess from a high-level perspective, I would argue that those that say there's a pressure on the forestry in general, I just refer folks to the fact that the activity that's happening and the removal of fibre today is almost half of what it was a decade ago.

MR. FARRELL: Is that Crown and private both combined - that's a global provincial figure?

MR. FRANK DUNN: That would be both.

MR. FARRELL: I would be interested to hear what Mr. Eddy has to say on the point as well.

30

MR. EDDY: As Deputy Dunn has pointed out, I think the word "perception" is exactly where we are because clearly the facts don't bear it out, although I think it's very important because perception becomes reality, so why would that be? I think part of it, as Mr. Belliveau referred to, we're in the electronic age and we all know that pictures, texting and whatever, everybody is connected today and so folks who in the past may not have been as close to those activities become involved immediately because you've got one picture on the Internet now that goes out to hundreds of thousands of folks and everybody thinks that's what the whole world looks like.

The other thing is I think there's no question about it that Nova Scotia, we're a fairly small geography. I think we were talking earlier about in the order of 6.5 million hectares - it sounds like a lot but when you think that B.C. is 98 million, it shows us what it is. Of course people are spread through this whole province and so increasingly we're seeing that forest/urban interface, and so in the past if you lived in New Ross, you grew up around that and you were quite accustomed to driving down the road and there might be a forest harvest - one that wasn't there the day before and it started that day.

If you lived in Colby Village or some of these other places, that may not have been part of your regular experience, but now when you get on the road to go to the hockey rink, you're increasingly going through areas where you're seeing these various activities, so people see it.

The government has made a commitment to work and be consultative with people and be transparent and accountable, so now again, we're posting on the web for people to see - this is the harvesting. Well, if your experience before was zero and now all of a sudden you're seeing this, I think that's part of what's driving the perception, but absolutely, as per Deputy Dunn, the fact of it is that we're just - it's not a fact.

MR. CHAIRMAN: Ms. Lohnes-Croft.

MS. SUZANNE LOHNES-CROFT: I thank my colleague from Queens-Shelburne for opening up the spruce budworm because I had a question about that as well. A lot of the foresters in my area are starting to talk about what is coming. Yesterday I was at an outdoor recreation and play symposium in Mr. Belliveau's constituency, and the topic came up over how it's going to affect recreation in Nova Scotia.

Will this affect the harvesting plan you have set out for the department and for Nova Scotia?

MR. EDDY: Yes, inevitably it will. Again we come back to the point - I don't think anybody could project, unless with the most fortunate circumstance that the budworm won't have an impact - there will be some trees that will die.

One of the first things we will be doing is looking at directing harvesting operations into those stands that are being affected and that don't look like they are going to survive.

I think it's important to understand that the budworm's operation in the forest is it eats the needles on the softwood trees so the leaves of the softwood trees, if you will. The softwood puts new needles on every year and that's generally where the budworm feeds, on the fresh needles.

Where the problem comes is when the population builds up that there's so much feeding pressure there that they eat this year's needles, they eat last year's needles and before. So now the capacity of the tree to produce food is very much reduced. The average softwood carries somewhere between five and seven years' worth of needles. The rest of them, if you think about a tree that you look at the inch closer to the trunk, there are no needles there and that's because they've dropped off. So once all the needles have been consumed and you are left with only what could come on in the next year's growth, the tree is going to be in serious trouble.

There will be a whole series of monitoring and understanding where the most severely affected stands are and every effort will be made to focus harvesting efforts there rather than on healthy stands.

MS. LOHNES-CROFT: And you have a communication plan to go with that for our foresters?

MR. EDDY: We do. As Deputy Dunn alluded to earlier, two years ago we had a consultant - the Barrington Consulting Group - who spent a whole year working with us and our stakeholders developing a framework for how we could respond to the budworm. A big part of that was what the necessary communications links and activities were that would be part of that. There is a series of committees that have been identified. I think the deputy referred to the fact that the executive committee has already been stood up, we're now looking at the science committee and the communications committee beginning to become operational and start working on some of these issues.

MS. LOHNES-CROFT: Thank you, I'll pass that on to my colleague.

MR. CHAIRMAN: Mr. Irving.

MR. KEITH IRVING : I guess I've got about six minutes - maybe I'll just move to the question that I want to make sure I get in here this morning. I want to go back to the Auditor General's Report and the recommendations. It pointed to a clear lack of monitoring of silviculture, stumpage fees and quantities, the use of risk management practices, and it suggested there was more thorough reporting and performance measures required for progress on the action plan.

If you read carefully in the report, it doesn't say that wasn't happening but I think that as we work to ensure that we have a social licence to harvest this important resource, we do have to worry about the public's perception. I wondered if you wanted to expand on what was happening.

32

One could read those recommendations and say oh my goodness, nothing has been happening, this has been completely mishandled over the last number of decades. Could you tell us what was happening and then expand on your agreements and the work being taken to follow up on the Auditor General's recommendations?

MR. FRANK DUNN: I can start, Mr. Chairman. I think it's a good point to make. It was not in the Auditor General's Report that we were not doing anything, far from it. When an auditor comes in to audit a particular program or file, one of the things they look for is documented evidence. In this particular case, monitoring was actually happening, and that's where we fell short. Verbally we could describe to him what was happening with regard to monitoring of harvest plots on Crown land, but he was looking for documentation and so in that particular area we were somewhat deficient.

As I mentioned in my opening remarks, we have accepted all his recommendations, so on a go-forward basis we are ensuring that documentation is here because we also realize that the Auditor General would be back sooner rather than later to ensure that we did what we said we would do.

One of the things that I think is important, which hasn't been mentioned this morning is when you come to monitoring programs - whether it be with our harvesting on Crown lands or whether it be our silviculture monitoring to ensure that the licensees first of all have harvested according to our rules and regulations and done silviculture as well, we simply can't monitor every operation and every silviculture piece. We just don't have the fiscal capacity to do that.

One of the recommendations that the Auditor General made was to look at these things from a risk assessment perspective. We have initiated a risk assessment process - a recognized international risk enterprise management framework. Really what that allows us to do is to get the right people in a room and to say, what are the risks that are associated with harvesting or silviculture - whether it's the size of the harvest, whether it be volume, whether it be dollar amount, whether it be the contractor in question - a whole host of things we look at.

We develop a risk registry, and what falls out of that would be described as the most risky or the areas that we should look at from a monitoring perspective. I can tell you that from the silviculture perspective we started that process in August of last year. We've gone through the process. We have identified 500 silviculture sites in the province that we will monitor. Those sites are currently with our Regional Services division to do that monitoring.

We've also done the risk analysis on our harvested operations. We just concluded that analysis at the end of March. We're now in the process of going through that information. I believe we're about a month short in what we said we would have that done for the Auditor General, but we're on target also to highlight those areas that we need to monitor from a harvesting perspective as well. MR. IRVING: I think what the Auditor General has provided us isn't important in terms of using risk management with respect to enforcement. As you say, we can't be everywhere at every time, and risk management is an important tool if we are going to effectively use taxpayers' dollars to do enforcement.

So it's fair to say - and this goes back to your opening comments that all of the recommendations will be completed, I believe you said by July 31st, is that correct?

MR. FRANK DUNN: On the forest management and protection recommendations we will be concluded by July 31st. There were two recommendations around the natural resources strategy, which we didn't get into today. We plan to have those addressed when we table our five-year progress report on the 10-year strategy in August of this year.

MR. CHAIRMAN: Time has expired for questions. Mr. Dunn, would you like to provide some closing comments?

MR. FRANK DUNN: I would like to thank the committee members for the questions this morning. For those questions that we advised that we would follow up on, we'll make sure we get that information to the committee, so thank you very much.

MR. CHAIRMAN: Thank you very much, we appreciate your time and your answering of all the questions today.

We do have some committee business. We have correspondence from the IWK Health Centre - that was information requested from the February 17th meeting. It is pretty straightforward. Everyone has received a copy of that, are there any questions on that correspondence?

Seeing none, we also have correspondence from the Department of Business. This was raised in our agenda last week but I understand the information was not in front of you at the time. There was a request for the proposals that were put forward to Cabinet, relating to the future of the visitor information centres. The response that came back from the Department of Business was that those documents form part of a submission to Executive Council and that Cabinet confidentiality ensures issues may be deliberated by Cabinet with candour.

In light of these circumstances, it was the position of the Department of Business that it would be inappropriate to disclose those documents to the committee. Are there any comments on that response? Hearing none, I presume that the committee is okay with foregoing further pursuance of that information.

The next item is our next meeting, which is on April 13th. That is with the Department of Internal Services, Justice, and Housing Nova Scotia. It will be to discuss Chapter 3 of the Auditor General's November 2015 Report. We have a briefing on that meeting immediately following this meeting. So unless there's any further business - seeing

none, this meeting will recess and return here within minutes for a briefing with the Auditor General. Thank you.

[The committee adjourned at 10:57 a.m.]