

HANSARD

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COMMITTEE

ON

RESOURCES

Thursday, May 24, 2018

COMMITTEE ROOM

Current State and Future of the Forestry Industry in Nova Scotia

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Resources Committee

Ms. Suzanne Lohnes-Croft (Chairman)

Mr. Bill Horne (Vice-Chairman)

Mr. Chuck Porter

Mr. Brendan Maguire

Mr. Hugh MacKay

Mr. Keith Bain

Ms. Kim Masland

Ms. Lisa Roberts

Ms. Claudia Chender

[Mr. Chuck Porter was replaced by Ms. Rafah DiCostanzo]

[Mr. Hugh MacKay was replaced by Mr. Keith Irving]

In Attendance:

Mrs. Darlene Henry
Legislative Committee Clerk

Ms. Nicole Arsenault
Assistant Clerk, Office of the Speaker

WITNESSES

WestFor Management Inc.

Mr. Marcus Zwicker - General Manager

Forest Nova Scotia

Mr. Jeff Bishop - Executive Director



House of Assembly
Nova Scotia

HALIFAX, THURSDAY, MAY 24, 2018

STANDING COMMITTEE ON RESOURCES

10:00 A.M.

CHAIRMAN

Ms. Suzanne Lohnes-Croft

VICE-CHAIRMAN

Mr. Bill Horne

MADAM CHAIRMAN: Order. I call this meeting of the Standing Committee on Resources to order. I am Suzanne Lohnes-Croft, and I am the Chair.

Today we are receiving a presentation from Mr. Marcus Zwicker, General Manager of WestFor Management Inc. and Mr. Jeff Bishop, Executive Director of Forest Nova Scotia.

I'll ask committee members to introduce themselves.

[The committee members introduced themselves.]

MADAM CHAIRMAN: I'd like to remind people in the gallery, and also members, to put your phone on vibrate or tuck it away so we have no disruptions. The only people allowed to take photographs are members of the media. Washrooms and coffee are in the anteroom, and if we have an emergency, please leave by the Granville Street exit and proceed up to the Grand Parade where we will meet.

Members and witnesses, please wait to be recognized by the Chair as it helps Hansard pick up your microphones.

I'd like to welcome you again, Marcus and Jeff. Which one of you would like to make your first opening comments?

Mr. Bishop.

MR. JEFF BISHOP: Thank you, Madam Chairman, for having us here and thank you all for inviting us to be part of discussion today. I have to admit that Marcus and I were a little bit surprised when we were asked together to come to present to the Resources Committee, mainly because we work together within the industry but we are from separate organizations, so we were a little bit confused as to what the topic might be or what the interest was to have us here. I think both of us, as you'll find as we go along this morning, like to take any opportunity we have to discuss forestry within our province.

The topic we were asked to discuss today, the current and future state of the forest industry, is pretty broad from our perspective. There are lots of things we can discuss under that umbrella. We figured if you're requesting us to appear here then you likely have a series of questions for us. We thought that it would perhaps make the most sense for you to ask your questions and for us to have a bit more of a discussion about forestry and not necessarily subject you to listening to me giving a presentation.

Having said that, I will start with a few items just for some context. The work Nova Scotians in our sector, and in our industry, do every day in managing forests across this province are grounded in passion, science, and legacy. Talk to anyone in the forestry and you'll quickly know that it's more than a job - forestry is a way of life for them. People in our sector are passionate about what they do, and you can easily see that.

In talking with that person in forestry you'll also quickly learn that because forestry is itself a science discipline, it's strengthened every day by research, planning, data, and other tools that guide our decision making at all levels. The other part of the story you'll hear from someone in forestry is that they know their work is part of a legacy. By taking good care of our forests today, they are growing the forests of tomorrow for their families and for our province, as many of them have done for generations.

Our sector and the industry it supports is highly integrated. Private landowners provide somewhere between 70 to 80 per cent of wood for the market for products that our sawmills and pulp and paper mills make. Without markets to sell that roundwood, the value of forestland can decrease, and it has an impact on rural communities across the province. Our sawmills and pulp and paper mills rely on those private landowners, fibre from Crown land, and on each other for exchange of wood and wood fibre that ensures best, highest value and use for that fibre, using every product in each tree that's harvested with virtually no waste along the value stream.

Once you dive in and take a look at that value stream, it's not hard to see that without each part of the puzzle, each part of the sector and industry, our integrated system could begin to fall apart. From Christmas trees to two-by-fours, maple syrup to pulp and paper, the products we make and export from here in our province are in demand. From the forests of Cape Breton to Cumberland County, Yarmouth to downtown Halifax, forestry is a vital part of our economy. Not many know that forest products are the number one category of products that flow through the Port of Halifax every day, making it a vital part of its operations and of its future.

Looking at the impact economically within the province, it's an industry that provides just over \$2 billion in total economic impact, employing 11,500-plus Nova Scotians directly and indirectly. On an annual basis, around \$800 million in contribution to the provincial GDP allows for investment in health care, education, and infrastructure. Forestry is an important part and an economic driver that builds and maintains the kind of community that's both mine and yours.

The forest products industry ranks fifth in Nova Scotia and contribution to the GDP from the goods and products sector. It ranks second in jobs in the goods and products sector, and third in Nova Scotia exports in the goods and products services.

It's hard to deny that forestry and forests are part of our lives in this province; 75 per cent of our land base in this province is covered by growing, healthy forests; 65 per cent of that forestland is privately owned - 50 per cent by small companies, individuals, and families across this province.

Are there things that can improve in our industry, in our sector? Absolutely. There is in any business. Continuous improvement is a driver in our sector: from new trucking configurations that can lower the impact on our highways, to deriving new fuel supplements and sugars and other products from the forests that we grow, to new equipment that improves safety amongst our workforce and how we manage our forests every day. Things are always improving.

An industry that's employing Nova Scotians, exporting products that bring money into our economy, all while growing forests for tomorrow based on leading-edge science and sustainable forest management - forestry is doing well today and ready for tomorrow here in Nova Scotia.

MADAM CHAIRMAN: Mr. Zwicker.

MR. MARCUS ZWICKER: I'm going to echo Jeff's comments. They're sort of where we see forestry in the future. In terms of the position that I'm in, I think forestry has a very bright future in Nova Scotia and has a very bright future worldwide. I'm very happy to be here today to answer any questions you may have about that and go forward.

MADAM CHAIRMAN: We will start with questions and I'd just like to remind members, we'll ask one question and you'll get one supplementary. Let's try to keep our questions together and brief so that as many people can get to ask questions, as I think there are a lot of people who are interested in this topic and have questions that they would like to ask.

Ms. Masland.

MS. KIM MASLAND: My first question is basically just asking for a definition of clear-cutting with your operations. I'll direct it to Mr. Zwicker, if I could.

MR. ZWICKER: Today, on land we operate in western Nova Scotia, a clear-cut for us is a stand in which we remove over and above 50 per cent of the standing timber on any given site. That's how we would typically define a clear-cut. Stands can range in size from as small as half an acre all the way up to 100 acres or 150 acres, but in any one of those individual stands or forested areas when you remove more than a certain percentage, greater than 50 per cent of it, it becomes clear-cut.

MS. MASLAND: My understanding right now is that you can cut 50 hectares in a cut, you're required to leave a wildlife corridor, and then you can actually cut another 50 hectares right on top of that - do another corridor, and again?

MR. ZWICKER: That's correct. Today there is a clear-cut limit in Nova Scotia, 50 hectares is the maximum opening size, so a clear-cut, and then you do have to leave a 50-metre wildlife corridor in between those stands or in between those corridors, and then you can do another one and so on. Typically, on forest stands, you don't continue on down that path, but typically the 50 hectares would be a large opening size. That's provided it's going to be used for continued forest.

If you were going to do a land clearing, for example, for a highway or a building development or a change in land use, those wildlife or guidelines wouldn't apply. For forest use they do apply, that's correct.

MADAM CHAIRMAN: Ms. Roberts.

MS. LISA ROBERTS: Building off the question from my colleague - we are hearing public concern about clear-cutting, including in the western Crown lands. I think the concerns are aesthetic, they're the impact on biodiversity and wildlife and soil health, as well as the impact on other forest-based industries like maple syrup or wild mushrooms or ecotourism, some of which we haven't really developed yet - also the concern that clear-cutting tends to lead to more boreal forest sometimes replacing more mixed forests, including hardwood species.

Mr. Zwicker, I guess my question for you is, when you are looking at WestFor's operations on the ground, what leads you to decide that clear-cutting is the appropriate treatment for a given block of land?

MR. ZWICKER: On western Crown land, we follow the Pre-Treatment Assessment process. I assume some of the people in this room are well aware of it. There are a lot of different things that go into making a decision on any individual stand, not necessarily a landscape but an individual stand. It's a stand level assessment process that determines what applicable forest treatment we would do in that circumstance. There's a host of them, up to a dozen different potential treatments that someone performing a Pre-Treatment Assessment on that area would get for an outcome.

In making that decision we do a soil sample, you look at the underlying ground vegetation, you look at the windthrow hazard, the moisture level of the soil, you look at the quality and the abundance of certain tree species with the end goal, I should say, of what type of forests you would like there in the future.

Given the current forest condition and then what type of forest condition you would like to see there in the future, that determines what treatment you would do in that area.

There are a lot of different potential reasons why you would do a clear-cut over a different form of treatment. One of them could be - I was in a stand yesterday that had 70 per cent of the trees blown down, so it was a salvage harvest from a wind event that happened in Kings and Annapolis Counties in 2014. In that circumstance, when you did the Pre-Treatment Assessment on the ground, 70 per cent of the trees are blown down so it's considered a salvage, so that would end up as a clear-cut.

In another circumstance, you may have over-mature trees with enough acceptable young regenerating trees underneath to consider the site regenerated with certain tree species. Typically, we would like to have them - or we have to have them long-lived, red spruce, white pine, that are specific to that individual site that would typically grow there. That would be a circumstance and you would do what's called an overstorey removal, where you remove the merchantable over-mature trees and allow the light and the nutrients and the other resources that are on the site for the young trees to use. There's a whole host of different reasons why, but those are just examples of the circumstances where you would do a clear-cut.

[10:15 a.m.]

Another one would be a pine seed tree cut where you leave residual trees on the site - maybe 20 per cent of them to seed in the young forest underneath, because there aren't any acceptable young trees growing in the understory. In that circumstance where we remove more than 50 per cent of the mature trees that are there, it would be considered a clear-cut.

There's a large list of different outcomes that would lead you to different treatment types, but those are just examples of reasons why in a day-to-day, on-the-ground operation that a Pre-Treatment Assessment would prescribe a clear-cut over another type of treatment.

MS. ROBERTS: I'll get both of you to comment on this. Given the lack of social licence for clear-cuts or the public concern about clear-cuts, what are actions the province could take to shift forestry towards more selection harvests? One of the specific questions I have is whether in various ways public policy, including tax rebates and so forth, actually encourage gearing up with the sort of equipment, for example, that encourages clear-cuts because your harvesters are appropriate for that sort of treatment. Would you support public actions to move towards more selection harvests, particularly on Crown land, which is where we can really use public levers?

MR. BISHOP: I think over the last few years in my time within the forest sector, the last decade, we've seen the provincial governments of the day - each of them - look at clear-cutting as an issue, and as you say, the concern from the public around that topic and what could or should be done within that - most often, as you say, in reference to Crown land forestry within the province.

I think that they've taken some steps to encourage what possibilities are out there in terms of alternate treatments, as Marcus was talking about - the variety of treatments that are out there - and arming those who are making the decisions on what to do with the best tools that are there. Marcus mentioned, as an example, the Pre-Treatment Assessment process that gives all the options and makes the best options of what's out there for treatment on the ground in a given forest stand.

Because there are trees growing on a stand in a given area does not mean that the best decision would not be to clear-cut in a certain area - Marcus started to give a list of some of the reasons why, and what have you. We can't have a conversation based on an assumption that every growing forest is equal to the next stand that's there.

Sometimes, quite honestly, public discussions around that portray that - that every forest stand that's growing in our province is equal to the one that's next to it, so the decision that's made here on the management for this forest stand should apply everywhere. That's simply not true.

We see stands - again, Marcus referenced one of many that we have. Our province sticks out into the Atlantic Ocean like a thumb. We've got wind here and we've got more and more wind here than we've had, and we know that's going to be a continuation into the future, so managing for things like windthrow is a necessary part of the decision making that we have to do. When you have a stand where a high percentage of what is there is actually not growing, that it has been thrown down by wind, you have to take that into consideration.

Arming our folks with the best tools to be able to make the best decisions and on Crown land, perhaps it is asking that when it comes down to one or two - here are your two options of what is the best management option for this given stand, perhaps if we make the decision that we do not clear-cut on a portion of the land when there is another option, then that's a path that could be taken. But I think it has to be driven by what's growing on the stand or not growing on a stand and what the future prospects of that given stand are. It can't simply be a policy that's written on a piece of paper that defines what the blanket policy should be for operations across the province, because the fear is we will not be doing proper forestry and what's best for the land if we're basing it on a number as a target.

MADAM CHAIRMAN: Mr. Zwicker, would you like a go at this?

MR. ZWICKER: Jeff touched a lot at the stand level, and he's 100 per cent right when he says that you don't have to drive very far or even fly or walk very far in Nova Scotia to where the forest changes very dramatically and drastically - a couple of hundred metres in elevation, a few hundred metres in soil change conditions gives you a completely different forest, whether that forest was created from a natural occurrence or from a man-made occurrence.

You can go from a grown farm field to a black spruce swamp to a hardwood hill all within a kilometre walk through the forest. Every one of those stand conditions, if your goal - and again, I'll touch on that in a minute - it depends on what your goal and objective is for that individual section of forest or for that landscape. You have to combine two factors, really. You have to look at what's there today; regardless of what happened in the past, you have to look at what's there today. Then you look at what you would like your forest to be in the future; if this is a good site for potentially growing hardwood trees, high-value hardwood trees, what management regime gives me that best outcome or leads me there the fastest, or is the best treatment for this site to get me to that desired outcome?

Across Nova Scotia we practise extensive forestry, which means we're trying to operate and apply a lot of different values across the landscape, right from Cape Breton to Yarmouth. We don't segment different parts of Nova Scotia or different areas and say over here we're going to have this goal of intensive forestry, per se, where we cut everything and plant it and follow down the model, and over here we do this and over here we do this. We try to look at the landscape and look at the stands regardless of where they're located, and apply a management regime that determines, based on what's there in that individual stand or that individual landowner's woodlot or that individual forest, and apply, based on the manager's goals or the owner's goals, what treatment is going to get me there.

Jeff is right, in certain circumstances selection harvest or a whole host of different non-clear-cut treatments or clear-cut treatments may be the best option given the current forest condition and where you want to have that forest value in the future. That value could be aesthetic, the values could be social, the values could be economic, the values could be recreational, but depending on what those values are, given that either landscape or larger

level goals or a very minute two-hectare patch, would determine what type of treatment you would want to do there to get you to those goals.

In certain circumstances, clear-cut, seed tree, strip cut, selection harvest, all the different types of harvesting tools - that's one part of the puzzle that will help you get there.

A lot of the treatment type you do on the foreground depends on what you're going to do at the background, we call silviculture. Once you harvest a tree then theoretically you have to grow a new one. What you undertake for silviculture practices has a lot to do in taking the forest from where it is today into what you'd like to see or what type of goals you'd like to have that forest in the future. Given that, it may lead you down different paths.

If I don't have the money from a landowner and I don't have the money to plant trees, then maybe there's only certain options I would do to try to get natural regeneration of a different tree species in the understorey, or growing on that site. Or maybe the site was naturally like the one I spoke of earlier in Kings County that I looked at yesterday, was a naturally occurring softwood stand, nice mature red spruce. Maybe the best thing, once we salvage that, in order to get red spruce growing again on that site, is we go in and plant red spruce trees there.

It's hard to pinpoint two or three individual things that you could write in a piece of legislation that would say this would gain - and I'll use your term, Ms. Roberts - a social licence. Even in a situation like this, it's very hard to describe - on any given woodlot, any given parcel of land or any given forest - what you should do. Again, every one has a different current forest condition, different forest soil type, different wind regime. At the same time, it may be managed for a different value.

Me and Jeff may have two different woodlots side by side, similar forests, but we may have different values from that forest. As a result, we may manage them completely different and undertake different harvesting or silviculture practices on that landscape or on our woodlots, regardless of what the manager would pick or what the owner would want for values.

MR. BISHOP: I think that last piece that Marcus touched on is really important. To go back to one of the pieces of the question that Ms. Roberts asked about private lands as well, the will and objectives of the private landowners are key in the decision-making process of what happens on their lands. There are some 25,000 to 30,000 private landowners who hold forest land in Nova Scotia. The objectives they have for the way in which they manage their lands are part of the decision-making process and must be recognized as that. They and their families, in many cases, have managed forest land as a resource, as a form of income for their family.

To tell someone that you cannot do what you wish - following all the regulatory regimes that exist for everybody who is harvesting on land for forestry in Nova Scotia - that they don't have the right to do that is tantamount to me telling you how you can manage your RRSP account. There are a number of people who have holdings just for that. It is there so that when it's time for my daughter to be married, or my daughter to go to university, or for retirement time and income is needed during that retirement time - there are people who harvest their land to help provide income for their family to do just that.

It becomes a point where is government of the day willing to direct folks who are managing and hold those lands for that reason, to tell them that they can't do it if they are completely following the regimes and regulatory environment in which they can do that?

MADAM CHAIRMAN: Thank you. I think I now know how my parents paid for my wedding.

MR. BISHOP: It's sometimes referred to as the rural RRSP, and there's a lot of truth to that across this province - people who hold land for those kinds of reasons.

MADAM CHAIRMAN: We'd like to move on. You can come back later and do a supplementary.

Mr. Maguire.

MR. BRENDAN MAGUIRE: Thank you for being here today. We hear a lot of talk about the economic impact of the forest industry and obviously it's extremely important, in particular to rural Nova Scotia. But also when we talk about the forest industry, there are other impacts. There's the environmental impact and then there's the social impact.

What is the industry doing to secure those social licences, to ensure that private landowners who are not using their land for harvesting - the area that I'm in, for example, for my cottage, there's some clear-cutting going on, or some harvesting going on in that area. What are you doing to speak to the local residents, to speak to private landowners, to say this is what we're doing and to ensure that there's no impact when it comes to redirection of waterways, when there's no impact on vegetation and wildlife? Obviously, when you harvest land, that wildlife has to go somewhere and there will be an impact, I would assume, on surrounding properties. What are you doing to talk to those individuals to ensure that their piece of paradise is still secure?

[10:30 a.m.]

MR. BISHOP: I'll start with that. Every individual landowner - be they a private landowner - who decides that they're going to conduct a harvest on their woodlot and the intention is for forestry purposes - it's not a change in use, if you will - that they must abide by the regulations that exist for forestry within this province. If there is a waterway within

their woodlot, they have to abide by the same regulations that Marcus or any large company that's doing forestry within the province has to abide by. The same for wildlife regulations. It applies throughout.

When I was referencing Ms. Roberts' question, it isn't different on private lands when it comes to the regulatory regime that exists for forestry on those very topics and others. Those are in place. People have to abide by those.

MR. ZWICKER: You touched on a lot of things, Mr. Maguire. I'm not sure where your cottage is, who the land manager is or the landowner. Depending on who that land manager is or who that landowner is, there may be certain obligations for the one part which would be the consultation process, which I think you're speaking of when you talk about talking to the individuals who may be affected by what's going on around them.

I could be quoted as wrong here, but right today, I don't think there's any legislation for private landowners to consult or speak with adjacent landowners about operations that occur on their property. However, there are large companies in the province and large landowners - some of them own manufacturing facilities, some of them don't - that have their land third-party certified. What that means is that somewhere along, the customer that they sell their forest product to would have asked them to make sure that the products they're producing are coming from a certified source.

There are two primary certifications - SFI and FSC here in Atlantic Canada - that come with a lot of requirements of the land manager to make sure that the forest products they're producing are being managed in a certain socio-economic manner. That's so the harvest levels are at a level that is sustainable in the long term, and that they do proper consultation with affected individuals - it may or may not be the adjacent landowner, but it may be ATV groups, hunting and angling groups. Wildlife NGOs are included in the management planning and decision-making process. It could be as simple as they're making sure that any wood purchases they procure aren't stolen from someone else's property.

That is one avenue where that consultation process happens in Nova Scotia. A lot of the land I work on, a portion of it is third-party certified through SFI. The Province of Nova Scotia holds that certificate today - about a third of the area. There's a public advisory stakeholder committee made up of 20 members of different stakeholders and the land base - primarily land users or people who are concerned with or actively involved in managing species at risk, like the Mersey Tobeatic Research Institute that have seats that are involved in the management planning and the advisory of the management of that area.

Again, outside of some of the larger corporations or larger landowners that have that certification process in place, the consultation isn't necessarily a legal requirement per se in a situation like you're speaking of. By the same token, on the other side, in terms of wildlife, water quality, there's a whole host of legislation and practices that we have to

undertake and live by as forest professionals, which are put in place to protect those environmental and wildlife values.

On a note of that, the forest is an ever-changing dynamic. Animals and plants and organisms of all species require a lot of different forest conditions. Some of them require multiple as part of their life; some of them require 15-year-old saplings; some of them require old growth-tolerant hardwood; and some of them require 40-year-old white pine stands, spruce for thickets. There are all kinds of different forest habitat that exist out there. One of the goals of forest managers who own or manage large tracts of land is to provide the habitat requirements for wildlife across the landscape. It is different. Again, the forest is an ever-changing dynamic.

MR. MAGUIRE: I'm glad that you brought up the diversity of our forests and also what the wildlife needs are in order to live off those forests. One of the questions that I have always had about the industry was if I went in tomorrow and I harvested the land, and I took all the trees off there, there's obviously hardwood, softwood, and vegetation that all different species of animals depend on - are you putting that back? That is the question that I have always had.

Are you putting back what is needed for those forests and those animals to continue to thrive, or are you putting back what is profitable, and then those animals are going somewhere else?

MR. ZWICKER: I'll start first. You would be breaking the law if you harvested all your trees. In Nova Scotia, we have wildlife and water guidelines that wouldn't permit you to do that unless you were converting your land into something other than forest. If you were going to grow an agriculture crop or build houses or something different, there are different rules, but if you were going to continue to maintain that, in forest management you couldn't just go in and cut all your trees; you would be breaking the law. Presuming that you followed the guidelines, there's a host of different mechanisms that are in place that different companies, different managers, or different landowners follow to promote or decide on what new forest will grow in that circumstance.

In the lands that I operate on, which is our western Crown lands, we would do what's called a regeneration survey. We're going to get awfully technical here - you basically have someone walk into a site, and they do a plot or a circle and they measure how many young trees are growing there.

If there aren't any of what we would consider long-lived core species - red spruce, white pine, hemlock, and tolerant hardwood - then in that circumstance we would plant the species that would grow best on that site, again depending on elevation, soil quality, wind exposure, all the different environmental things I talked about earlier. We would make sure that site was replanted with the species that would grow best on it.

If there was natural regeneration on that site that meets the criteria of those long-lived desirable species, then, no, we would not plant. We would look at the site later - in five, six, or seven years - and we would probably do some manual spacing with a spacing saw or do some other type of density control to make sure we really promote those species that we would like to have growing on that site that best fit it, based on its ecological characteristics. Again, you don't plant a sugar maple on a white pine site, and you don't plant a white pine tree on a sugar maple site, for example.

That's on lands that I operate on. On private land, individuals make the decision that is in their values and goals. If I'm a landowner and I harvest my site - maybe it was 70 per cent balsam fir, which isn't a very desirable species in Nova Scotia. I may decide to replant that site with red spruce or white spruce or something that provides me greater economic value than the balsam fir that was previously growing there.

MR. BISHOP: If we see a warming climate in Nova Scotia, balsam fir is one of the first species that we have growing here in Nova Scotia that is simply not going to grow in a warming climate. We make decisions about the future like that. It has that sort of an impact. It's not just my desires of what I want to grow on there from an economic or from a restorative - or for wildlife that's in the area. Because we're planning on horizons of 100-plus years at times within land bases, we're taking that into consideration. We know that if we see warming within our region, which Marcus just touched on, that's a great example of thinking I'm not going to plant balsam fir because in 50, 60, or 80 years it's just not going to be there.

MADAM CHAIRMAN: To the PC caucus and Mr. Bain.

MR. KEITH BAIN: Thank you very much for your presentation this morning. I want to follow up on a couple of things. You mentioned about forests being an ever-changing dynamic and you also mentioned about planning ahead for the future. I guess that's where I want to go, because when you look at today's forests in an ever-changing dynamic you will have your long-term goals and your short-term goals, but you have to know where the product is.

I guess my question would be, how does the industry or the province go about tracking the inventory that we have in this province?

MR. ZWICKER: In your briefing notes or the file that I saw you had access to, the State of the Forest Report, in that State of the Forest Report there is some very detailed inventory information about species composition, how much of each one of the major species groups, tolerant hardwood being one, spruce, fir, white pine, how much there is in the landscape. Then there's also a lot of information about what age those forests are. Those would be the two primary characteristics of the forest inventory - what species are there, and then of those species, how old are they? That's primarily how you characterize your forest inventory.

The Province of Nova Scotia today does a lot of different things to determine what it may be in the future. Once you understand what exists out in the forests and you get that, you can do it through - the term people use would be “timber cruising” - you walk through the forest, that’s part of the PTA process, then you measure the trees that are there and look at them and determine how much of each one of those tree species exist on the ground today and the age of those tree species. That’s one way we can do it.

The other way is through photo interpretation. You fly over the province, you take high-definition photographs, and then there are highly skilled people trained to look at those photographs. They’re able to predict the type of those trees, the age of those trees, and the species composition of those trees. That’s the way we do it today in Nova Scotia.

From that, once you have that baseline information, then what happens is all across the province they have what are called permanent sample plots. There are people who work for the Department of Natural Resources who go right from Cape Breton to Yarmouth every year, to the same location year after year and all the different types of stands, types of forests, and they remeasure the same trees over and over again, which tells them how fast they grow, at what ages they grow, all the different characteristics of those trees as they age over time. Then they take that information and model that or look at that, how those forests change out into the future.

Long-term planning horizons in forestry are 100 years, so they basically model those stands as they change, once we know what’s there, once we know how those types of trees grow in the province, we can sort of look at - we know that balsam fir doesn’t live much past 50 years old. We know if there’s balsam fir today that in 50 years that balsam fir stand is going to look significantly different, based on our permanent sample plots, what is the current inventory, and we know the characteristics of those trees.

The big move today across North America for forest inventory purposes is LiDAR inventory. The Province of Nova Scotia flew a significant portion of the eastern part of the province last year and they’re conducting on-the-ground surveys to validate the information. Most forest companies or most provinces in Canada are moving in that direction where they use LiDAR information - I’m not going to get too technical - they fly and it gives them a lot more accurate information and a lot more real time than the current two processes I talked about earlier, where you go on the ground, you measure the trees, and at the same time you look at the photos and interpret what’s there.

Today that’s what we use for tools; in the future, probably in the next five to 10 years, we’ll be doing it all using . . .

MADAM CHAIRMAN: Google.

MR. ZWICKER: It won't be Google but it's expensive technology, a little more expensive than Google, but that's the way of the world. It's not as expensive as walking every acre every five years, but it's a lot more accurate than using photo interpretation. The data is more readily available and accessible so that's the move we're making towards that.

[10:45 a.m.]

MR. BAIN: It sounds like an industry in itself.

MR. ZWICKER: Yes. There are departments and companies that employ people, and all they do is model and measure trees.

MR. BAIN: Great, thank you.

MADAM CHAIRMAN: Ms. Roberts.

MS. ROBERTS: I just wanted to say briefly in response to some of the earlier conversation, I think I'm clear and I think we all here are clear that WestFor is harvesting on Crown land, and so when we're talking about what public levers exist, we are talking primarily in terms of how we manage our Crown land. Certainly, I'm not contemplating in my questions trying to impose something on private woodlot owners beyond what the regulatory regime is currently.

As Mr. Bishop referenced, those woodlots are seen very much as a source of savings, a source of investment, and also income for private woodlot owners. Certainly, among many private woodlot owners in southwestern Nova Scotia, there is a belief and an interpretation of the facts that they see around them that WestFor has negatively impacted their ability to sell their wood. That's a very serious concern, especially when property tax time is coming around and there's no way to leverage some of that woodlot to get the revenue. Maybe it wouldn't be - I don't know what kind of wedding Ms. Lohnes-Croft had. (Laughter) Maybe it wouldn't be that big a chunk of income, but still it has been a reliable source of income for private woodlot owners.

I guess my question related to that is for Mr. Zwicker. WestFor is still relatively young - it's a relatively new operation - so one of the questions that I've heard is, are the delivered prices WestFor obtains from its member mills less than, equal to, or greater than the posted market prices that are available for private landowners trying to sell their wood?

MR. ZWICKER: I just want to clarify one thing, Ms. Roberts: "wood" is a broad term. We have a whole host of wood products in western Nova Scotia - probably 20 to 25 in any given year of wood products that are harvested and sold across western Nova Scotia, so it's a broad term. I would be challenged right now to understand if there are any woodlot owners that can't market or can't sell softwood sawlogs, white pine sawlogs, hardwood sawlogs, and to the point probably hardwood pulpwood.

I would say that there is a challenge, not only from the private woodlot owners' perspective but from WestFor's perspective - there is one segment of the market out there today that there is a very challenging marketplace for. It's primarily due to - I would not characterize it as WestFor securing that market, but there isn't a market to secure. That's how I would categorize that.

Primarily it would be the softwood pulpwood low-grade biomass market that previously existed in western Nova Scotia for decades, up until the closure of the Bowater paper mill. Once the plant closed in 2012, it became a very challenging marketplace for that product - to the point that even if you did have a place to sell it, today it's in the central and eastern parts of the province, and the cost of just trucking that wood product would be more than what it's worth at the mill. That's regardless of whether that product is harvested or grown on a piece of Crown land or a piece of private. All of us face that challenge.

That would be outside of that product category. I wouldn't say that there is an oversupply of wood products on the marketplace in the rest of the product categories - to the point that there are mills that had to take downtime within the last month due to lack of wood inventory, either had to take downtime or lay off shifts at their facilities because they did not have enough sawlogs, stud wood, or the other products that make up the other 80 per cent of the product category, to keep their facilities going.

Wood is a broad term. The wood products category is the one that is really challenging - very, very challenging - in western Nova Scotia, especially if you're looking to do forest improvement work. With forest improvement work or harvests, typically you harvest the trees that don't have sawlogs, that aren't going to be of high value in the future. As a result, you generate a very high volume as a percentage of those products that today there is no demand for. That is very, very challenging.

Jeff talked earlier about balsam fir. Balsam fir trees today - typically, 50 per cent of a tree would yield products that there is no market for. If you're trying to do forest improvement, those are the types of trees you're trying to harvest, leaving your longer-lived, higher-value trees. But when you don't have a market for half of the tree that you're looking to harvest, it makes it very difficult economically to do that.

MR. BISHOP: If I may, just to build on what Marcus is talking about, all those products are interconnected. When we talk about biomass or pulpwood or sawlogs or stud wood, that's all coming from the same tree. It's an important part of the conversation that sometimes gets missed when people say, I can't sell my wood.

You might be struggling with a particular product that's within that, but in order for me to make the decision to cut down my stand, that's a valuable component at the end that there is no market for. If there's no market for the smaller, spindly, dead, and dying portions of the tree that make up your biomass portion of it, or it's too small to be sawn, so pulpwood - like Marcus was saying, I can't see that there's no market for stud wood and above, if you will, in terms of dimension size.

But when those other pieces are not paying for part of the harvest, it doesn't make sense to be harvesting for any of it. It doesn't allow you to recognize the value of the full tree that goes throughout the value chain system if a portion of it is worthless to an extent or just has no monetary value. In essence, it decreases the value.

If you're willing to take the hit - I'll build on Marcus's example of a balsam fir stand where half of the value of that stand is nil. If you're willing to take that and weigh it off - if a full tree was worth \$1 in good market times and now you're going to take 50 cents for that tree because half of it has no value, but you're getting the value out of the sawlogs or stud wood that's part of the tree, that's your decision as a landowner or a land manager to do that. But if the markets are there for the full tree, you are more easily able to realize the economic decision that you're making, that you're going to get 95 cents for your tree as opposed to 50 cents.

Some of those are very much driven, right now within Nova Scotia, by where you are in the province because we have a changing market in the dynamic of what we call low-grade wood, that biomass and pulpwood. There is no market for it in that end.

That's driving those conversations when you dig in with landowners in western Nova Scotia - what wood are you having problems selling? We know the stud mills and the sawmills are looking for wood. It's an important part of a distinction of what helps drive that economic decision making.

MADAM CHAIRMAN: Do you have a supplementary? (Interruption)

MS. ROBERTS: Maybe I'll do a supplementary and then, Marcus, feel free to jump in with whatever else you wanted to say on my first question.

I do want to ask for some clarity as to whether WestFor's delivered price - pick a category, sawlogs, pick one of those wood categories - is different from what would be available to private woodlot owners.

I want to press on that point in part because as Mr. Bishop mentioned earlier, the forest industry is very integrated, but with WestFor we now have a new form of integration, or a new consolidation of integration, because the sawmills need access to wood and now they have come together to manage Crown land, so they're going to continue to access wood, some of which has no value. But I think the perception is out there amongst private woodlot owners, is it that the sawmills are underwriting the harvesting at a loss of WestFor because the sawmills are the partners in that harvesting operation? Maybe if it weren't for WestFor the price of wood for other products would actually be going up so that there would be enough incentive for the mills to actually get the wood it needs for the products that are in demand.

There does seem to be at least a perception of connection between the arrival of WestFor, the organization of WestFor on the ground, and the prices that private woodlot owners are able to access for their wood product. I understand the prices have rebounded somewhat from a year ago, but I would like to ask you to speak about that relationship of price from WestFor to the mills.

MR. ZWICKER: I'll comment on price first. I don't know what individual wood suppliers get paid from mills today. Most of them negotiate, especially a lot of the larger volume producers have negotiated rates with mills that change drastically, depending on how far away they are.

To categorize and say that this person receives more for their wood than this person, in western Nova Scotia a large percentage of that cost or what the mill would pay a producer is driven by distance. You could be 20 kilometres from a mill or 200 kilometres from the mill, and the 200-kilometre wood would be significantly more expensive to the mill than the 20-kilometre wood, just simply from the fact that it's that far away.

It's a very broad categorization to say one supplier, whether it's WestFor's wood deliveries to the mill or another private woodlot, would be higher or lower than somebody else's. Because of the large, large percentage of the delivered wood price in western Nova Scotia, the distance for trucking wood today - I'll touch on that in a minute - it's driven by how far away you are, which may be different than in the central and eastern part of the province where typically the wood doesn't go much more than 150 kilometres. A lot of the wood we move or that private woodlot owners move has to travel a lot further distance to get to market than they do in the other parts of the province.

WestFor's wood prices primarily are driven by stumpage. In Nova Scotia, Crown land stumpage and then distance are the two primary factors that determine the cost. It's very difficult on the distance side of things to make a comparison. What you can compare are stumpage rates, which the province does on a semi-annual or annual basis. They conduct market research by an independent third party, it goes in samples, private wood transactions determine what the market prices are for wood across the province. They don't pick certain landowners - I don't think they do, I'm not part of the survey - and that's what determines the price that WestFor or any other Crown licensee in the province - central, western, eastern - for wood products pay the Province of Nova Scotia for that wood.

As far as I know, it's a pretty robust, independent, fair system to the point that we've received an exemption from the U.S. Department of Commerce in terms of not having to pay the types of 20 per cent and 30 per cent lumber tariffs that the rest of Canada have had to pay where they determined they don't have a fair market stumpage valuation for the price of Crown wood.

To answer your question directly about the delivered price of wood, there are two factors in that. The first one is transportation that drives what the delivered price is because whether you're a private producer operating on Crown, private, or elsewhere - typically harvesting rates or the costs of actually extracting the wood product are pretty similar between contractors if you're operating on private or Crown or industrial freehold. The contractors move fluidly throughout those different landowner types to operate on different landowner tenureships within their given geographical area.

[11:00 a.m.]

Given those are pretty relative, then the other two factors you really look at in terms of delivered price or stumpage - the first one the province does is proven by investigators out of the Department of Commerce in the U.S. and by, I presume, the Government of Nova Scotia, to be a pretty robust system in determining the fair market value for that wood.

The second part being distance - again, it's very hard to compare across different landowner types, different woodlots around a delivered wood price when the distance may be upwards of 250 kilometres, which may change the value of that wood or the cost of that wood delivered to the mill by upwards of 40 per cent.

Those are the variables that go into the delivered price. Two of them are pretty confident - one is set based on the private wood price and the other one is the price of contractors who do work across different land tenures, so there's not a lot of variation between those land tenures.

The third one is transportation. That's a very hard one to determine to say, compare this truckload of wood and this truckload of wood and are they the same, because they may be coming from two completely different parts of the province with essentially the same product on it.

That's what I do know, but I don't know a lot about the delivered price that one of the private wood producers in western Nova Scotia may or may not get at another mill. I'm not involved in the private land marketplace today, so I can't really comment on that.

The other part I wanted to comment on earlier was around the supply end of things. Nova Scotia, in the last 10 or 11 years - since 2006, really - we've seen a reduction in the amount of wood harvested in the marketplace in Nova Scotia by almost 45 per cent. Historically we were well over six million cubic metres of wood harvested for a quarter of a century, pretty near.

Since then, over the last three years - I haven't seen 2017's registered wood buyers' report yet, but we've been in the range of 3.6 to 3.8 million cubic metres of wood; again, a significant reduction. Because of that significant reduction, it has been felt right across the land tenure sites - whether that's Crown, private, or large industrial. Primarily the lands

that WestFor operates on were large industrial holdings before, which made up a significant portion of the wood supply - 40 per cent, historically.

I do know our last years of operating, the mills that make up WestFor - there are 13 of them - 82 per cent of their wood purchases came from private landowners, so 18 per cent came off Crown land; it wasn't just WestFor. The other 82 per cent came from private wood purchasers, which for some of them - if you were to go back 10 years to Bowater and J.D. Irving Ltd. and days when 40 to 45 per cent of the wood harvested came from large industrial players, that's a significant reduction for them. They've actually had to source a significantly higher level of private wood to supplement the fact that those large landowners are no longer managing lands and delivering wood to their mills. It has been a big change in the last six years in terms of where wood comes from, who owns and manages it, and for what objectives in the western part of the province.

MADAM CHAIRMAN: Mr. Irving.

MR. KEITH IRVING: Thank you for being here. The more questions that are asked - I've got dozens of them here. What I've learned in inquiring about the forest industry is the complexity of it. I think you've begun to outline that here with the science, the integration of the industry, the importance to the economy, that it's our number one product through the Port of Halifax, management practices, climate change and its impact on the industry going forward. We have a very complex industry.

Mr. Lahey is now doing a study to help Nova Scotians understand this complexity and figure out a path forward with so many questions that are surrounding the industry right now.

This is a forum for you to get your voice heard publicly, so I thought I'd ask you both, I'm wondering if you could perhaps tell us what you feel is the most misunderstood aspect of the forest industry that you want Nova Scotians to gain a better insight - what's the most misunderstood part of that dialogue going on right now?

MR. ZWICKER: Thank you very much for your question. We talked a lot about science and markets and all kinds of stuff here so far, but I would say the most misunderstood part of forestry that I deal with on a daily basis, I work with people and I would say that is the most misunderstood part of forestry. I work with hundreds of people in any given work month, work year, who go to work every day, get up and go to work in the forests, whether they're people planting trees, whether they're people measuring trees, whether they're people doing soil analyses, whether it's people doing surveys for species at risk, whether they're people shearing Christmas trees - they are a misunderstood bunch. They're portrayed publicly, as I call them, Joe Lumberjack with a chainsaw looking to cut every tree from Cape Breton to Yarmouth.

A whole host of different people work in the forest industry, everything from doing digital mapping to running a harvester to, as I said, putting a tree in the ground, to just walking around the forest trying to make decisions about how and where the best spot is to put an ATV trail. We don't understand, I would say, as a collective industry, right from the Christmas tree producer to the large landowner, how we take what they do every day, the passion they have for their jobs, the third, fourth, fifth, sixth generation of forest management, in my case, and in thousands of other forestry workers, we consider ourselves forestry workers in Nova Scotia, the effort and the decision making and the passion we have for what we do doesn't really make it to the public eye.

There's the cartoon in *The Chronicle Herald* versus the person who gets up and goes to work every day, trying to manage the forests of Nova Scotia to a better outcome. Whether that's on Crown land, private land, right from Cape Breton to Yarmouth, that would be the part that I would say, to answer your question, doesn't get best understood.

MR. BISHOP: I don't know that I can say that any better than what Marcus just talked about. I think in your question was probably the answer I would give. It's the complexity that's part of it, looking at all the pieces that go into the decision-making process, whether it's on a one- or two- or five-year operational planning to the 100-year horizon planning that goes in at a larger scale with companies, or the planning that is done by family members for their decisions on what they want in terms of the forest management on their own woodlots. I think it's that complexity. I think it has been boiled down to quite largely public discussions about forestry in this province, or boiled down to one phrase - clear-cutting - and the notion of good or bad. I think it's quite unfortunate that that's where it is.

Our industry has been part of that, and as we've said, we're people who go to work in the woods, and for years and decades we've just gone to work in the woods and done the work and know the complexity of the industry and what goes into our decision making. But more and more people are paying attention and making comment on that. That's absolutely fair and they're right to do so; people are entitled to their opinion about forestry, absolutely. What concerns me is people aren't entitled to their own facts around forestry. Until we have a good discussion, like we're having today, about the complexities that exist within the decision-making processes that go into forest management in our province, I think it's doing it a large disservice to boil it down to a discussion of good or bad about one harvesting method that is a portion of what we do every day.

MR. IRVING: Just in relation to that, as we await Mr. Lahey's report to help us understand those complexities, I was wondering how you both have felt about Mr. Lahey's work. Presumably he has consulted with you. Maybe you would like to comment a bit about how that process has worked for you. I'll leave it at that.

MR. BISHOP: I'll go first. I guess like hundreds of other Nova Scotians, we played a role in the work that Professor Lahey is doing through his review of forest practices in the province. We made a written submission and had the opportunity to go and sit down

with him and a number of members of his team - that is specifically Forest Nova Scotia and my own opportunity.

I can't really comment on the work that he has done; I haven't seen anything other than what we had as a discussion around the opportunity that he has had. But I do know that members of our association, from private landowners and Christmas tree growers to the sawmills and pulp and paper mills, also put their hand up and made submissions, some of whom had opportunities to speak with Professor Lahey or members of the advisory team that worked with him. Beyond knowing that we encouraged anyone and everyone involved in our industry to put up their hand to ensure that Professor Lahey and those folks who were helping him write the report, or whatever form it comes in, to give him the best view of the complexities of our industry as he can best see and understand, and if he makes recommendations or whatever form it takes, that he has had the best opportunity to understand the industry and go from there.

MR. ZWICKER: Much like Jeff, I personally, as well as the organization that I work for, had the opportunity to present, as did hundreds of other Nova Scotians. We presented verbally, and I assume consultants or members of his team came to the forest and wanted to see what actually happened there and talk about different things that we do in the landscape as the group did right from Cape Breton to Yarmouth.

I have not seen the report; I anxiously await its outcome. He faces some challenges, as everybody understands. I'm sure he's the right man to deliver. And I'm sure not everybody is going to be happy, I know that.

MADAM CHAIRMAN: Ms. Masland.

MS. MASLAND: One of the questions that I have is concerning silviculture funding. Growing up in Queens County, there are a lot of private woodlot owners that surrounded where I grew up and they have been reaching out to me very concerned about the level of access to silviculture funding. They can't afford it.

I guess my question would be directed to Jeff. From your organization, are you hearing that from many of the private woodlot owners, and is there any type of plan with industry and government to try to increase the levels of silviculture funding in Nova Scotia?

MR. BISHOP: I wear a number of hats as the executive director of Forest Nova Scotia. One of those is I am also a director with the Association for Sustainable Forestry, which is a partnership between industry, private landowner organizations, and the province, to put silviculture funding on the ground in Nova Scotia.

The simple answer to your question is every year demand for silviculture outstrips the budgetary allowances, if you will, that are there for the program through the Association for Sustainable Forestry. We can understand by looking at that as an example that, yes, there is want and need by landowners in this province to make those investments

in their lands. Obviously, there is a great interest in it. I can understand when folks are coming to you and saying that there's just not enough money in the budget that's there.

[11:15 a.m.]

MR. ZWICKER: I'm going to refer to the State of the Forest Report. Historically in Nova Scotia, if you look at some of the peak years in silviculture spending, we're a far cry from the amount of dollars being spent on silviculture funding even 10 years ago.

In regard to the people around Queens County or Shelburne County who would be calling your constituents, they're 100 per cent right. There's not nearly the amount of silviculture money being spent on any of the land tenureships that would have been spent in recent memory.

That's primarily a function, first, of the program in Nova Scotia being typically funded through the registry of wood buyers program, which is silviculture funding that's tied to the amount of wood harvest. That's an obligation borne by the purchaser of the forest product. They have to spend X number of dollars for every cubic metre of wood they purchase back on the same land tenures in terms of silviculture dollars. If you purchase private wood, for every cubic metre of purchased wood you purchase, you have to spend X number of dollars in terms of silviculture back on private wood; if it's from Crown land, on Crown land; if it's from an industrial landowner, to industrial landowner.

As we spoke of earlier, since 2006 the harvest levels in the province have dropped by 40-plus per cent. As a result, the corresponding silviculture funding that's available went down along with it. Mechanism number one is that, at the end of the day, under the current model in Nova Scotia, where the mills fund based on the amount of wood they purchase, is corresponding to the amount of wood that's harvested. As the harvest levels decrease, the amount of funding available to do silviculture and any type of land tenureship will go down - unless you own the land and are willing to match, put in, do silviculture as your out-of-pocket costs.

Again, given the landowner tenureship type in Nova Scotia, that's not always the case. That has led to where we are today in terms of silviculture. If you look across Canada, there are all kinds of different benchmarks in terms of percentage of stumpage revenue per se that gets used to regrow a new forest or thin a forest or do commercial thinning or do different silviculture applications that the cost of the treatment doesn't cover.

Today in Nova Scotia, the registered wood buyers program is the primary way in which silviculture gets funded for any type of land tenureship. As you harvest less wood, the amount of dollars being spent on silviculture go down. That's just a fact, the way the system works in Nova Scotia today.

MS. MASLAND: The other issue that I'm hearing a lot about through Shelburne and Queens is the invasive species glossy buckthorn. It is really doing some serious damage to our trees. I know MTRI has done a little bit of work up around Keji to try to deal with that and basically cut it or spray it to get rid of it. I'm just wondering what type of work the industry is doing to try to get ahead of what that species is doing.

MR. ZWICKER: At a small scale, if it's on your woodlot or on a piece of property, whether it's in Kejimikujik National Park or on lands that MTRI own, it can be very devastating to the forest. It basically overtakes it. You don't have any young trees. You don't have any underlying vegetation. It's an invasive species no different than chain pickerel in a lake that had trout before. It basically eradicates all your other species of vegetation.

Today there are not a lot of options in terms of what's available to remove it from your landscape. It's very localized, so it's not something that's widespread - it is widespread but it's not on a large scale. We're not talking hundreds of hectares. It may be an acre over here or an acre over there, which makes it hard to treat - not only from that side of things but from the fact that it's not in your overstorey. Even if you wanted to do something like an aerial spray like you would typically do for budworm or some other type of forest pest that has had an impact on your forest, it's very hard to do when it comes to glossy buckthorn because it survives in the understorey.

I've written letters to the federal government, worked with some of the people like landowners that I work with and know, and they have it on their properties. Really the only mechanism in place today is to cut it and use glyphosate through a manual application on the stump or on the plant itself, to be able to kill it and then remove it from the site. That's the only treatment today or the only tool in the toolbox to work with glossy buckthorn that I'm aware of.

I do know there are groups like Kejimikujik National Park, there are some landowners in Queens County and Annapolis County who have tried different things and the only ones I know that are effective are to use a glyphosate product combined with a manual removal, which is very time consuming and expensive, and if it does get to the point where it's affecting the landscape on a large scale, that's really when it gets to the point that it's unmanageable.

MADAM CHAIRMAN: Ms. Chender.

MS. CLAUDIA CHENDER: This is, I guess to start, mostly for Mr. Bishop. You've pointed to the complexity of the industry. Certainly, there are lots of reputational, perceptual issues that may or may not apply in given circumstances, as you've said. Certainly, one perception and one that we hear about are the challenges faced by smaller, more value-added businesses, particularly in rural areas, that are using hardwood.

Finewood Flooring in Victoria County shut down in 2014, they couldn't find a reliable supply of hardwood. The same thing happened to River's Bend Wood Products in Antigonish in 2015. Another smaller business group, Groupe Savoie, is managing to survive, their operations are reduced. These are family businesses and they provide good rural jobs so they are connected to the economy, of course, and they produce high-value products. Our understanding is that the hardwoods these businesses could have used, that they're having a hard time securing for higher value use, are being used for lower value uses - being sort of chipped and shipped.

I guess I'm asking you to comment on this. The perception is that these larger lease agreements don't really work to maximize in every case the value of Nova Scotian forests, economic or otherwise. Certainly, there are those large industrial uses for wood but there are lots of other uses in terms of - certain value systems are of great value to the forest as a whole but also have economic value in those rural areas.

I know you and your organization represent the broader forest industry. I guess my question is, could you comment on that and say something about why these value-added companies are having a hard time with supply, and what might be done about that?

MR. BISHOP: Thank you for your question. It's difficult to comment specifically on companies like those you mentioned, mostly because I don't know their operations, the way in which they went about procuring wood, whether they had folks that that was their job within the company - quite honestly, I don't know. For me to comment on how they access wood within the market would be a guess, and I'm not really willing to do that in front of this group because I don't have the understanding of how their companies operated and what led to the decisions they made in term of their companies.

One of the broader impacts, and it goes back to a point that Marcus made earlier, is that we've seen a shift in the overall level of harvest across the province in the last decade. We saw this really came to the fore in 2015, because there are a lot of folks who are purchasing first-hand. They're buying their firewood from a supplier, someone they know, what have you. It affects the home individual much more than someone who's making a product.

As an example, we saw it flare up as, where's the firewood in Nova Scotia? It's suddenly not there. Why is that? It really comes from the fact that we see a 40 to 45 per cent decline of our overall harvest. If firewood is a component of that - I'll make up numbers just for the sake of today because I don't have them at the tips of my fingers - if firewood is 5 per cent of that overall harvest, if you shrink the entire base by 45 per cent, what now makes up that 5 per cent is much smaller. It's not the same number in total value of what it is.

The impact is felt at every one of those products, if you will, that are along the line. If we have an overall harvest that has shrunk 40 to 45 per cent, the percentage of hardwood at that higher value that's available for specific product makers like you mentioned simply isn't there. It's not part of the harvest because over that decade it has shrunk by that 40 to 45 per cent.

There's more demand for those individual pieces. You named three, four, or five companies. They're all competing quite literally for the same sticks of wood. The marketplace will only bear what's there for supply and what's there for demand on the other end of the facilities that are wanting to buy and produce those products. There is no wood fairy. I don't mean to make light of that, but it quite honestly isn't there. When the supply is not there, you're not going to have a supply. If you are company X and you're making maple widgets and you're willing to pay five times what Marcus' widget company is making, then you're going to dominate the market. You're going to buy the supply.

If that doesn't happen, it's like any other industry that relies on a supply to make a product. If you have shrunk the overall supply, then the portion of what you're looking for that's out of that has also shrunk. It's just the realities of the market, of the supply that's there.

What is a completely different question: is the wood still growing in our forests that could supply? I would say yes, that it's still there, but because the market on the harvesting aspect has shrunk and the overall demand for that harvest has shrunk, it has taken that actual supply that's already harvested out of the market.

MR. ZWICKER: I can add a few comments. Groupe Savoie is one of the members of WestFor. Every day and every week, they face challenges of how to access more hardwood for that mill. It's a family-owned business. They struggle; they have had to take significant downtime in the last three to four months due to lack of supply.

On my side of things, one of the challenges I face is the fact that they're in Pictou County and a lot of our operations are a significant distance away - 300 or 400 kilometres away. But again, we're maximizing every hardwood sawlog we can.

The challenge I face is when you harvest a hardwood tree, whether you're doing a tolerant hardwood stand or selection management, whether you're taking out your low-grade intolerants or you're actually harvesting a hardwood tree that has a sawlog in it, it makes up a very small percentage of that tree. In my part of the world, that hardwood tree that has a hardwood sawlog doesn't get cut unless you have a home for the other 80 or 90 per cent of the tree.

[11:30 a.m.]

Today in western Nova Scotia, there aren't a lot of homes for that other 90 per cent of the tree, so you can't cut the tree that has the hardwood sawlog in it. That's not to say that there isn't a forest full of hardwood sawlogs out there growing, but you can't afford, from an economic or operational view, to leave 90 per cent of that tree on the ground. At the same time, you can't do it from an ecological and or land manager point of view - harvest a tree and leave that much of it on the ground, whether or not the person on the other end is willing to pay the price to get that, to extract that tree or not. It makes it very difficult. We harvest 25 per cent of the allowable hardwood cut, what is growing on the land base every year.

If there was a home for all the hardwood that was growing on the land base, you could probably extract more of the hardwood sawlogs. There just is not a home for the remainder of the tree, other than the hardwood sawlog, today. That's what we're faced with, again, primarily due to market contraction and distances to take that low-end product.

For a softwood tree, it's typically the other way. Instead of it being 80 per cent low-grade - pulpwood, firewood, or something that has lower value - 20 per cent of the tree would be of the lower grade, and 80 per cent of the tree makes a sawlog or saw material of some sort, whether it's a piece of stud wood or a sawlog. That is of high value, so then you're able to extract it and maybe not receive any economic benefit from the remaining 20 per cent.

In the hardwood business in Nova Scotia, unless you have been intensively managing your hardwood forest over long periods of time, 10 per cent is a pretty good or average run. You just can't afford to harvest a tree and not utilize the other 90 per cent of the tree. It's a sad fact.

MS. CHENDER: I think what we've been hearing, whether or not it's true, and you'll have an opportunity to comment again, is not so much that those smaller businesses - and I wouldn't ask you to comment on any specific one, although I appreciate the comments about Groupe Savoie - aren't so much competing against each other but against larger industry players who are using the trees for lower value uses.

Last year, this committee heard from Robert Taylor of the Taylor Lumber Company about their successes operating sustainably. He echoes some of your comments, Mr. Zwicker, about the need to use all of the hardwood. They are FSC certified. They have reduced their clear-cuts and diversified their products. They are getting those several values out of each tree.

Quoting him, his comments were that he believes the current forestry industry is actually subsidizing bad business models that aren't valuing diversification and diversification in the uses so that it does become more economically viable. His quote is that "Rather than cutting more trees, we need to cut fewer trees but do more with them."

That doesn't sound to be at odds with what I have heard here. He says that Taylor Lumber is "able to produce more with one tree, employing more people, than using 10 trees for just one product," as is often done.

I would just invite comments on that and ask if you also see that potential, on the demand side, the industry side, in terms of those kind of more diversified businesses that, in fact, could justify more selective harvesting, higher value uses and better management, ideally, of our forests.

MR. BISHOP: To your point, I think Mr. Taylor and his family company is an example of folks who are willing to make the investment of time and dollars, capital, to be able to say what he said. They have made the decisions over the years to manage their company and their lands to be able to do business the way the Taylor family does within their business. That's commendable, absolutely.

Is there an opportunity for more of that to happen? I think there is, but we need entrepreneurs, business folks, who are willing to jump into the market to deal with - if we use the hardwood example - the other 90 per cent of the tree and develop those products. The business case doesn't always work for each business to diversify and use the capital that they have or are willing to expend to develop their company in the same way that the Taylors have.

Would I like to see it happen, that there are more companies that are strengthening our industry in this province, to ensure that we are able to maximize the best end use for all of the products? Absolutely, I have no problem with that portion of your question.

You did talk about the perception that's out there about hardwood - again in particular, I believe if I'm understanding your question right - about products being used for a lower end use than what the product could dictate on the market. Am I understanding you correctly on that?

MS. CHENDER: Yes.

MR. BISHOP: I quite honestly struggle with that notion, because if it's an economic market, the market will bear what will pay for a product. We talked about it a little bit earlier, all the factors that go into the price at the end of the day that an individual landowner may receive for stumpage from their land. It's not different than what you're talking about, what that individual cost may be that drives decisions of where a particular product will be used.

I can't see a case where a hardwood veneer log that has high value would be chipped. If there is an end user, someone who is willing to pay for that product - a veneer-quality log that has that high value - and they have a procurement system that they come to any landowner and they buy that from them and take it to their facility and make the product that they're going to make, then the market will allow it. It will happen.

I can't see, if there is an end use where there's someone within the market who is willing to pay for that high-end product, why a landowner or a land manager would ever sell it at a lower value, if you're in business. I guess that's where I struggle with that notion that that's happening.

MS. CHENDER: Could I just make one clarification? I think when I'm talking about value, I guess I'm pointing a little bit to what you're saying. It may be that a large corporate interest can pay more so they can deliver more economic value, but that not all of the wood may be used. Again, it's a question, but to clarify that when I say "value," I'm not just talking about dollars paid to the woodlot owner but about the use of the product.

MR. BISHOP: Okay, absolutely. That's my response in saying if there's someone who is going to use it - the portion of that - that has to exist. I don't know if I'm making myself clear. We can't say someone should be making purple widgets in Nova Scotia for a high-value product if there's no company making purple widgets in Nova Scotia. Because there's a hardwood sawlog on the market, for example, if there's nobody that's either willing to pay for the product or is willing to make that product, the potential that's out of there, then I struggle to see how - that's a false situation. If it doesn't exist, how do you - I don't know how to comment on a hypothetical situation.

MS. CHENDER: Am I allowed to respond?

MADAM CHAIRMAN: We're really getting short on time now . . .

MR. BISHOP: If it provides clarity - I don't know, you have say over it, I don't.

MADAM CHAIRMAN: Do you have something you needed to - you don't have to respond.

MR. ZWICKER: I can add to Jeff's . . .

MADAM CHAIRMAN: Sure, go ahead, Mr. Zwicker.

MR. ZWICKER: I'm really not going to touch on the hardwood sawlog versus another product use but to your earlier comment or the earlier part of the question, about if there are products in Nova Scotia that could add value through the value chain that are current markets for worldwide? Yes, there are.

To clarify, there are products that we consume every day in our daily lives, forest products - you look around the room, drive down the road, go in any building in Nova Scotia, in any store, you're going to see whole aisles of forest products that could add value in the value chain that aren't made from the forests in Nova Scotia - and not only that individual product, but aren't made in that category at all.

That's for a whole host of different reasons. Some of it may or may not be that we have that type of tree or that type of product growing in our forest, some of it may be that we don't live in a jurisdiction where the economic conditions would entice someone to invest the capital to be able to use that product, whatever those economic conditions could be - maybe it's power rates, maybe it's wood cost, whatever the reason might be. It's a worldwide competitive marketplace for capital and there are certain conditions for a forest products business, primarily certainly being a supply.

If you talk to people looking to utilize capital in Nova Scotia's forest industry, that would be one of the bigger deterrents or one of the bigger factors that they struggle to overcome - I'm going to make an investment today and I need 20 years to recoup, pay my investor back or invest that capital. Not that there's not a business case or a marketplace for that product in the world, or in Nova Scotia, but I can't somehow see where I'm going to get my forest product five years, 10 years, next week, when you touched on it earlier that we have businesses that currently exist in the province, we have a growing stock of trees out there that could fit and supply those mills but we still had some of those mills running out of wood supply in the last three months that had to send employees home.

Those are some of the challenges we face with our existing industries. There is a whole host of other forest products out there, everything from probably the cards that our names are written on or the cup that we're drinking water out of, that aren't made in Nova Scotia that could come from products made in Nova Scotia, but for economic decisions it's about how I take my money from an investor and invest it in the forest industry in Nova Scotia - there may be a whole host of different reasons why they don't do that today.

MADAM CHAIRMAN: Mr. Horne, we don't have a lot of time so you probably won't get a supplementary question. We have a bit of business to do.

MR. BILL HORNE: Fair enough. First of all, I'd like to thank you, you've been very open and forward with us and we see the complexities you are showing us that need to be discussed with the landowners or with the mills and with government and so on.

I guess I want to ask more of a question, how our government representatives or our government can help you. You have questions or things that they could do within some standards, I guess, or some amounts that could be favourable for improving lower valued woods to be used. You talked a little bit about that and I'm just wondering if you could direct maybe something directly to the government that we might improve some of the issues you may have. Both of you could answer.

MADAM CHAIRMAN: And not developing another Crown Corporation, we'd like to do that.

Mr. Bishop.

MR. BISHOP: To echo the Chair's comments, I'm not sure I would encourage Crown-based companies buying into the market or creating that within the market. I think what best positions that possibility for investment in capital to be able to do that, the levers that government can pull, if you will, that are at their disposal are things that Marcus mentioned, about creating the best environment, whether at a regulatory or legislative level within the province, or to provide the opportunity for private investment of capital within the industry to be able to alleviate, if you will.

[11:45 a.m.]

One of the areas is that low-value wood. That's not just found in western Nova Scotia, there's an issue across the province with that low-grade wood that's there. I know that there have been discussions with certain companies interested in setting up in Nova Scotia, and some are looking at new technologies that can potentially come from forest fibres that are out there, and to be able to continue to strengthen - and I would encourage that as the best role that government can play. Help us find folks who might be interested in investing in Nova Scotia and provide the best regulatory and legislative opportunities - environment, I should say - that you can as legislators to encourage that type of private investment in our province, in forestry and beyond.

It's not only forestry. When we see the regulatory and legislative environment that you set as legislators that encourages or discourages business investment across our province, it has an echo effect. If it's one that looks at our industry, others are listening and watching and deciding to invest or not.

I guess that would be my piece of advice to each of you individually as legislators, and collectively as government, and those watching with sharp pencils, watching the governing Party of the day. That is your role, to provide that best opportunity for that investment, whether it's our industry or beyond.

MADAM CHAIRMAN: Order. I'm going to ask you to close with final remarks.

MR. ZWICKER: I would like to say thank you. I'll echo in my final comments what Jeff started with earlier. The forests are a very integral part of Nova Scotia. It's not just the forest industry - we all use them, walk in them, and look at them all day every day. I don't think the forest industry or Nova Scotia's love of its forests is going away anytime soon. I look forward to spending the rest of my life working in them.

MR. BISHOP: I thank each and every one of you for having a discussion today. As I said in my opening comments, Marcus and I are always eager and willing to have discussions about anything and everything having to do with our sector and our industry, and we want to thank you all for being part of those discussions in this very public forum that we have. I offer, myself and on Marcus' behalf, any help or advice or any way that we can be of assistance as you discuss forestry with your caucus colleagues or your constituents, anything that we can do to assist in continuing those discussions like this one that happened today, we would be more than willing to be part of that.

MADAM CHAIRMAN: Thank you. We'll take a brief two-minute recess - and I say two minutes because we are running out of time. We can dismiss our witnesses, thank you very much. We'll resume in two minutes.

[11:49 a.m. The committee recessed.]

[11:51 a.m. The committee reconvened.]

MADAM CHAIRMAN: I'm calling the meeting back to order. Would members please take their seats. This will be our last meeting until September 20th. There are out-of-town caucuses taking place. We also decided to try to find another date. With graduations and events that are going on in our communities, it would be very challenging to find an acceptable date for members, and some have to come quite a distance. We want people to be able to enjoy their constituents and celebrate the graduations and activities that are going on in our school communities.

There are possible meetings for October and November. We were wondering if you would like to have an agenda-setting meeting. We do have some topics that are coming forward. Would you like to give them, Mrs. Henry?

MRS. DARLENE HENRY (Legislative Committee Clerk): What's left on the list is provincial mineral grants with the Deputy Minister of Natural Resources, and local food production consumption with the Department of Agriculture. I'm not sure if those are dated right now or to stay on the list and we can book them for October/November. Keep in mind that when the House goes into session, one or the other is going to be bumped into next year.

As the Chair mentioned, we could do another agenda-setting in September, for the September 20th meeting, if that's the wish of people on the committee.

MADAM CHAIRMAN: Is there a desire to have an agenda-setting meeting when we meet again in September? Mr. Bain.

MR. BAIN: I think the mineral resources one that Darlene mentioned, I believe that was prior to the Act coming into force. That's what it was dealing with, the Mineral Resources Act. I don't know if that's stale or not.

MR. MAGUIRE: Whose topic was it? It was ours? (Interruptions)

MADAM CHAIRMAN: Would you like to do agenda-setting so that your caucuses can bring forward some topics? Ms. Roberts.

MS. ROBERTS: I think that the one related to local food production, consumption, and promotion is certainly relevant. I look forward to having it scheduled. I'm okay to have an agenda-setting meeting.

Are we ever allowed to tag an extra half-hour to an existing date and do agenda setting immediately after or prior to a committee meeting?

MADAM CHAIRMAN: Yes, we do it during the two-hour period. We would just have our witness for an hour and a half.

Mr. Irving.

MR. IRVING: Based on the various comments that I've heard, I would suggest setting agendas in the near term if we don't want stale-dated agenda items. We may as well keep it until the second-last witness and tag it onto that meeting. I would suggest an agenda-setting meeting at our next witness meeting, I guess. That would allow us then to begin to line up witnesses for November, December, and January.

MADAM CHAIRMAN: What about having the food topic as the witness for that September meeting?

MRS. HENRY: That's the maple syrup people.

MADAM CHAIRMAN: Oh, maple syrup. Okay.

MRS. HENRY: I can set this food consumption one up for October.

MADAM CHAIRMAN: Okay, food consumption for October, maple syrup in September. Do we want to drop the resource one or can we pick that up at the agenda-setting? It can come forward at the agenda setting, okay? Are we all in agreement?

Mr. Irving.

MR. IRVING: Before we take it off - I'm not a sitting member of the committee, I'm just filling in. But I would suggest that it could be discussed at the agenda-setting meeting whether the minerals one drops off or we set some different topics. I think it would be a bit premature before we get our list of new topics to compete against mineral resources, I guess.

MADAM CHAIRMAN: We have consensus. Great.

Our next meeting will be September 20th with the maple syrup production in Nova Scotia. I call this meeting adjourned.

[The committee adjourned at 11:56 a.m.]