



HOUSE OF COMMONS  
CHAMBRE DES COMMUNES  
CANADA

# **Standing Committee on Environment and Sustainable Development**

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ENVI • NUMBER 031 • 1st SESSION • 42nd PARLIAMENT

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**EVIDENCE**

**Tuesday, October 25, 2016**

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**Chair**

**Mrs. Deborah Schulte**



## Standing Committee on Environment and Sustainable Development

Tuesday, October 25, 2016

• (1540)

[English]

**The Chair (Mrs. Deborah Schulte (King—Vaughan, Lib.)):** We'll get started. It looks like we have everyone in the room, which is great.

Thank you very much for joining us today. We believe this will be our last witness session for the protected areas. We hope that there are still some written submissions coming in, but we are very grateful for the time that you've been able to spend to come in and be here directly. We really appreciate that commitment.

Gary Bull is here by video conference. I just want to make it clear that he is on the audio and can hear us, but he cannot see us. However, we can see him. It's going to perhaps be a little distracting because there's a little delay between the audio and the video. If it looks like it's becoming a problem for people, then we will drop the video and just do the audio.

Duane Smith is here by teleconference, so there is just audio for him.

I just want to introduce everyone who is in the room.

From Inuvialuit Regional Corporation, we have Duane Smith, the chair and chief executive officer. Then from Nunavut Tunngavik Inc., we have Cathy Towtongie, president; Qilak Kusugak, director of implementation; Malaya Mikijuk, executive assistant; and Bruce Uviluq, legal negotiator.

Thanks to all of you for being here.

We have Gary Bull, professor at the University of British Columbia and head of the department of Forest Resources Management.

Then we have Jeremy Pittman from the University of Waterloo. He's a fellow of the Liber Ero Fellowship Program. I met with him earlier this week and suggested that he might want to come in front of the committee. Luckily, Cynara was able to organize that.

We have a full slate, so we'll get started. Duane, if you're willing, we would like to hear from you first.

**Mr. Duane Smith (Chair and Chief Executive Officer, Inuvialuit Regional Corporation):** Thank you very much for the opportunity. It's too bad that I'm not on video, but this is the reality of the north. Our Internet service goes up and down all the time.

• (1545)

**The Chair:** We're going to try to help with that.

**Mr. Duane Smith:** Like it was stated, I am the chair and the CEO of the Inuvialuit Regional Corporation. I think you have my presentation in front of you as well.

The Inuvialuit, Canada, and the two territorial governments are party to the Inuvialuit Final Agreement, which is a comprehensive land claim agreement that was signed and came into force back in 1984, so we're talking about an agreement that's 32 years old now. It's commonly referred to as the IFA, and it's protected by section 35 of the Canadian Constitution.

Three of the main goals from the IFA in relation to the objective of today's discussion are to preserve the Inuvialuit cultural identity and values within a changing northern society, to enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society, and protect and preserve the Arctic wildlife environment and biological productivity. Although these three goals must work together, this presentation will focus on the IFA provisions and implementation of the last goal, which is part of the parliamentary committee's deliberations today.

With that, to give you some perspective, we've provided a map that shows the area that the IFA applies to within Canada. As you can see it's roughly one million square kilometres in size, and about two thirds of that is ocean. On that map we've also provided some of our private lands, which are referred to as 7(1)a, where we own surface and sub-surface, as well as 7(1)b lands, which are surface only. The three large green areas on the map are also the national parks that we've negotiated with the federal government to have created for various purposes.

I should point out that the Inuvik National Park was also created under the land claim, which was the very first one to be done under a land claim with negotiations between the governments and ourselves.

The next page will show you the range and use by the Inuvialuit people within the ISR, and for the different purposes. This one is showing the harvesting purposes that were used within the region, to give you some perspective as to the use by the Inuvialuit of the area.

The next map will show you, again, the different travelling routes and the land use and occupancy by the Inuvialuit people for other purposes again.

The next map will also show you, again, different purposes of our use of the region. The reason I'm emphasizing some of this is to show you the importance of the land, and the environment, and the ecosystem to the Inuvialuit people, and our continued use of the region through today. So sustainability and the preservation of the ecosystem is very crucial to our identity, our culture, and our well-being because that's where we get the majority of our nutrition.

With that, the next map will also show you the different categories of importance that we've put on the different land and water areas within the Inuvialuit settlement region.

The next one has two images that will provide you with further detail on significant areas where we conduct our harvesting activities.

To provide you with a little bit of detail on the Inuvialuit settlement region, there are four national parks within this area. The land mass that it encompasses is roughly between 55,000 and 60,000 square kilometres. We also have one marine protected area established, and we've been in negotiations and are near the final process to approve another with the federal government as well.

We have major bird sanctuaries within the ISR. We have a territorial park, which is on the Yukon coast, which people continue to utilize and travel over on a regular basis.

● (1550)

We also have one national historic site, recognizing the Inuvialuit contribution to Canadian society.

Along the North Slope, the area on the northern part of the Yukon, as it's referred to, we have the North Slope Wildlife Management Advisory Committee. Within that area, east of the national park, the land is withdrawn under a withdrawal order in the Inuvialuit final agreement, so no development can take place up in that region without our consent. This also applies to the government, if there was a decision to have that area opened up.

I made reference to the conservation plans that each of our communities has established for their harvesting areas, identifying the sensitivity of those areas to wildlife harvesting practices and habitats. This process is a guideline and a tool that can be used for that purpose. It is also a reference for environmental screenings and reviews that might be required within those areas.

I've already pointed out that we have surface and subsurface lands within these areas that we manage through our Inuvialuit Land Administration Commission.

My counterpart under the Inuvialuit Final Agreement is the Inuvialuit Game Council. Under that, the six communities have six hunters and trappers committees that monitor and manage harvesting and the sustainability of the ecosystem within the region.

The Inuvialuit was the first comprehensive land claim agreement to establish environmental and wildlife management boards. These boards have appointed representation from Inuvialuit, Canadian, and the territorial governments, and they are commonly referred to as co-management boards.

As well, we have the Environmental Impact Screening Committee, which screens all development proposals within the Inuvialuit

settlement region. No development can proceed without being screened by this committee. The EISC may reject approval of terms and conditions or refer the development to the Inuvialuit Environmental Impact Review Board. The Inuvialuit Environmental Impact Review Board undertakes a comprehensive review of the development proposals referred to it and advises the minister on its findings. Under those two bodies, there's also federal and territorial representation, along with Inuvialuit, and they conduct those activities according to their mandate.

As well, we have a Wildlife Management Advisory Council for the Northwest Territories, which provides wildlife conservation advice to the appropriate ministry within its mandate. There is a similar Wildlife Management Advisory Council for the Yukon North Slope.

From the marine aspect, we have the Fisheries Joint Management Committee, or FJMC, and they provide advice to the federal minister on fish and marine habitat within the Inuvialuit settlement region.

We have a joint secretariat that provides administrative support and services to those co-management bodies I just made reference to.

The Inuvialuit are also concerned with the environment and the impacts on wildlife and beneficiaries, and we have undertaken several initiatives to ensure that the impacts are minimized to the greatest extent possible.

● (1555)

We have a community-based monitoring system to gather harvesting information that also provides us with the indicators of the changing ecosystem as well as predatory species that may be moving into the region, such as pink salmon. We found that they have come to the region en masse over this summer and fall, and this is the first time that's been seen.

We also have social, cultural, and economic indicators to measure the impact of development on beneficiaries. We've provided the website to you. We encourage you to look at it because it is cutting-edge information and a new way that should be looked at for assessing such indicators within different regions in Canada.

**The Chair:** Duane, I'm sorry to cut in. We have 10 minutes for each person to make their deputation, and we're at just over 11. I'm wondering how much more you have.

**Mr. Duane Smith:** I thought you had my copies. I'm right near the end. I probably have another minute at the most.

**The Chair:** Okay. Can you speed it up a little? We'll give you a bit more time, but we'll be really tight with the others if we're not careful.

**Mr. Duane Smith:** Okay. I will just cut to the very last part in regard to regional strategic environmental assessment.

The new government has allocated a budget, and we are working with them to develop the terms of reference, as well as the criteria to do an environmental assessment within my region. We're working to identify the gaps with the intent to develop a strategic approach to address those issues if and when development or whatever could take place within this region.

With that I'll stop at this time.

Thank you.

**The Chair:** Thank you very much.

We received six slides that we followed at the beginning of your presentation. Then, you went into a second piece, which was more about your plan and suggestions for this cutting-edge approach. We don't have that. Did you send that through?

**Mr. Duane Smith:** I will check with my staff to make sure it gets sent again if I didn't all go through. Like I said, we've been having technical difficulties in the region for the last few days.

**The Chair:** Okay. We'd love to get that second piece, but we'll probably start some questions on that when it gets to questions.

Thank you very much.

Cathy, you have 10 minutes.

**Ms. Cathy Towtongie (Co-Chair, Land Claims Agreements Coalition, and President, Nunavut Tunngavik Inc.):** Yes.

[*Witness speaks in Inuktitut*]

First of all, thank you so much for inviting us. My counterparts Bruce Uviluq and Qilak Kusugak are experts: one is a lawyer to be, and the other one has been involved with IIBAs right across Nunavut. We are prepared to answer any technical questions, and we mean business.

Thank you for your invitation. If you need to go up to Iqaluit or Nunavut, ask Malaya Mikijuk.

Before we start, Grise Fiord is a community that has 24 hours of darkness for about four months of the year. A new teacher just went up there and he asked his class, "Are you Canadians?" Everybody put up their hands, except two little guys. The teacher got very agitated, went up to them, and said, "If you're not Canadians, what are you?" They said, "Toronto Maple Leafs". So, you will remember Grise Fiord and 24 hours of darkness.

We welcome your study into how federally protected areas and conservation objectives should be developed and pursued, keeping in mind both domestic obligations and priorities and international dimensions.

As you know, Nunavut is on international boundaries with the Northwest Passage, and we're getting a lot of interest, especially with the *HMS Erebus* and *HMS Terror* being found. So there is a lot of international interest.

Protected areas and conservation objectives are nothing new to Inuit. Inuit have been protecting land and conserving wildlife long before these words were ever invented. Their lives depended on it, and still do to this day, and that's the reason we were nomads.

We have inukshuks. Those inukshuks can direct wildlife where we want them to go, we can find fish where we want to find fish, and we can measure the islands, from the islands to the fish.

Before Inuit moved into settlements, entire families used to move to other areas for long periods of time so that the land and wildlife could recover. That's the reason we were nomads. The hunting shelters—igloos, as you say today—are just hunting shelters. The living headquarters Inuit occupied were called *qagiit*, and they were

bigger than the size of this room. I've seen them in my lifetime. When Nunavut was formed in 1999, the experts wanted to show us how big the *qagiits* were.

This work, your work, is so important, particularly in Nunavut, which has 20% of Canada's land mass and 40% of Canada's coast. For any federal initiatives in relation to these matters, particularly the creation of a new network of marine protected areas, to be successful the Nunavut portions have to be worked out properly.

Let me begin with a few words about our organization, Nunavut Tunngavik Inc., or NTI.

We are a not-for-profit federally incorporated company answerable to the Inuit of Nunavut. We're the organization that, across Canada, asked for the division of the territory.

We represent Nunavut Inuit for all purposes associated with the Nunavut Land Claims Agreement that we signed with the crown in right of Canada in 1993, and it's not just with the Department of Indian and Northern Affairs, INAC, but with the whole of government: fisheries, INAC, foreign affairs. It's a constitutional agreement.

● (1600)

The Nunavut agreement is a bedrock feature of our larger and ongoing relationship with the crown and, through the crown, with Canada as a whole. It is a modern-day treaty agreement, but the Inuit-crown relationship is a valuable one: we are proud of being both Inuit and Canadian. First Canadians, and Canadians first. That is the term one of our leaders, Qilak's uncle, mentioned.

Section 35 of the Constitution Act, 1982 recognizes the Nunavut agreement as a modern treaty or a land claim agreement. Alongside the constitutional status and protection of our agreement, subsections 2.12.2 and 2.12.3 of our agreement provide that our agreement prevails over any contrary federal laws, that the paramountcy of our agreement extends to all federal legislation, and this applies to Nunavut fisheries, oceans, resource management, and the like.

In addition to our treaty rights, Inuit have retained aboriginal rights in matters not governed by the Nunavut agreement. The Nunavut agreement, in the first preamble, says that we, the Inuit, hold sovereignty over Canada. We demanded it, we wanted it in the agreement, and it is in there. Ours is the only constitutional treaty agreement that mentions sovereignty.

Our responsibility at NTI is to ensure that the Nunavut agreement is respected and implemented. We take that responsibility very seriously. We do our best to carry out that responsibility. We have taken part in developing legislation to better implement the Nunavut agreement, and we have been willing to make amendments to the agreement when there is mutual value at stake.

I would point to the Nunavut Planning and Project Assessment Act and the Nunavut Waters and Nunavut Surface Rights Tribunal Act. These two acts have strengthened resource management and conservation structures and processes. It is always nice to report success.

On the other side of the ledger, I regret to report that the Department of Fisheries and Oceans and the Canadian Coast Guard have for many years blocked our overtures to work out comprehensive new fishery regulations that would have a direct and lasting conservation pay-off while offering full respect for Inuit rights. We live in hope that the federal government now in office will devote the focus and energy to chart a new course on that work.

The area governed by the Nunavut agreement includes all the marine areas between and adjacent to the islands and coasts of the eastern and central Arctic. Inuit are a primarily maritime people, and our use and occupation of marine areas has been as geographically extensive and as economically important, as is the case with land areas.

The Nunavut agreement has 42 articles, with well-defined rights and obligations. One part of the agreement, article 4, provides for the creation of the territory and Government of Nunavut.

On Inuit impact and benefit agreements, another distinctive part of the Nunavut agreement is in relation to parks and conservation areas, articles 8 and 9. These articles have a number of features that are of direct relevance to any initiative for the establishment of new marine protected areas in Nunavut. They require the negotiation of Inuit impact and benefit agreements, IIBAs, prior to the establishment of any new protected area in Nunavut.

• (1605)

I want to emphasize that point. Inuit and federal government representatives will have to negotiate and conclude IIBAs before any new protected areas or other forms of conservation areas or parks are created anywhere in Nunavut.

Negotiations of new IIBAs will not take place in a vacuum. Fortunately the Nunavut agreement provides detailed guidance on the expected contents of IIBAs.

**The Chair:** Cathy, I just wanted to interrupt. I know you're about halfway through your presentation, and we are over 10 minutes. You're probably about halfway, right?

**Ms. Cathy Towtongie:** Yes.

**The Chair:** Would the committee be willing to double the witness time? Is there any issue with that?

We do have your submission in front of us.

**Hon. Ed Fast (Abbotsford, CPC):** We're all going to read this.

**The Chair:** So we are going to be aware.

I think that we can get into the details. Why don't we just extend for another two minutes just to wrap it up? We have your work in front of us. What you've given us will be on the record, but if there's anything you want to emphasize before we unfortunately have to cut you off... I'm really sorry about that because I appreciate the time you've spent preparing it and being here with us.

We'll get into it with questions.

**Ms. Cathy Towtongie:** It's okay, it's quite understandable.

I'll just go straight to the recommendations.

Before we start, historically, Inuit have different names for snow. *Pukajaaq* snow can give you certain hours of living, it's more

condense. *Minguliq* snow is the type that Mount Everest climbers try to take without understanding that it is the most dangerous type of snow, wet snow. So when we speak about recommendations, we're talking about marine life, ice conditions, and snow, and you can take directions when you are in a blizzard from what we call *uqaujaq* snow.

So recommendation number one is that, in pursuit of new marine protected areas, priority should be given to prior negotiation and conclusion of the relevant IIBAs in full and to creative conformity with the requirements and opportunities set out in the Nunavut agreement.

Recommendation number two is, in the negotiation and conclusion of IIBAs governing marine-protected areas in Nunavut, the federal government accept the NTI proposal, which is outlined in the letter that was given to Minister Bennett on September 13, 2016, to avoid administrative burdens. NTI has hired a drafter to draft Nunavut fisheries regulations, so the work has been done. Now the Department of Fisheries and Oceans has to work with the Inuit to make sure those are implemented. Inflexibilities, expenses, and distraction have routinely undermined the value and efficiencies of earlier IIBAs.

Recommendation three is that the Minister of Fisheries be encouraged to take up, at the earliest opportunity—and I'm asking you as the committee—that NTI proposal for the development of comprehensive new Nunavut fisheries regulations that provide for a more effective management regime. It's needed for Canada. We've gone through it with our own drafters, and now we want Canada to sit with us. We've come up with very concrete, objective proposals.

Thank you, Madam Chair, and I understand about the time. It happens a lot in Nunavut, too.

Thank you.

• (1610)

**The Chair:** I'm so sorry because I know how much time you have spent putting this together and being here. I'm so sorry to have to cut you off, but we will get to more of it in questions.

Next up we have Gary Bull.

**Prof. Gary Bull (Professor, Head of Department, Forest Resources Management, University of British Columbia, As an Individual):** Thank you.

I feel very humbled by the former two speakers, because I think they have probably a lot more wisdom to impart to you than I have, being a mere academic. I've been asked to talk about things slightly differently, in terms of the role of the north and these protected areas in mitigating climate change. I will keep my comments very brief, in the interests of time.

I want to point out a few things. First of all, I think as we move forward to try to meet our international obligations under the Paris agreement, we will need to have biological solutions and not just engineering solutions. By this I mean that we have to look at what solutions the forests and lands—wetlands in particular and agricultural lands—will contribute towards our obligations. I will explore that for a little bit.

The second part of my presentation is to emphasize the importance of the aboriginal peoples' engagement and involvement with finding solutions, both for protected area conservation issues and as well for climate change issues.

Finally, I want to make some comments about policy certainty and the kinds of things I think need to be addressed.

On the forests and the reason I think looking at biological solutions to our climate change problems is important, if you look at the data from 2014 you'll see that forest fires in Canada contributed more emissions—and this is particularly from northern Canada—than all transportation emissions. This means that we're looking at 25% of emissions coming directly from natural processes. Many of these fires, of course, occurred where aboriginal people live.

We can't ignore these natural dynamics. We have similar challenges around insects. Whether it's mountain pine beetles, spruce beetles, or spruce budworms, we see emissions associated with these natural forces from these insects that also contribute a great deal to our emissions problem.

Finally, there's what we call pathogens or diseases, which also affect the health of the forest. Together, fire, insects, and disease probably are the single largest contributor to our emissions—even greater, frankly, than the tar sands.

In terms, then, of how we manage protected areas, I think it goes without saying that it doesn't mean no management. It means that we need to engage aboriginal people in the co-management of these vast areas and that we have to deal with some of these biological processes if we want to deal with the climate change problem.

I'm an economist by training. I will say that the neoclassical approach or the approach we've taken to land management generally in the north has been very hands-off, reflecting what we refer to as extensive management. That's no longer sufficient, if we really want to intervene and deal with some of the biological problems that I've outlined, the fire, insects, and disease.

The boilerplate solution that we can contribute from a forest point of view is to plant more trees. We can afforest more areas, we can reduce waste and emissions through sustainable forest management, we can use more wood in construction rather than concrete, steel, and aluminum, or we can use more wood for our energy. We have 136 aboriginal communities on diesel power plants in Canada, and all of them could be switched, in most cases to bioenergy.

●(1615)

I think there's a lot we can do that would be consistent with some of the goals that first nations and aboriginal communities have set up.

I can only briefly touch on wetlands and say that's 12% of the area of Canada. Within these wetlands, much of it in northern Canada, the melting or the warming in permafrost regions is going to lead to a lot of methane gases, which have high intensity with them as compared to CO<sub>2</sub>. This could be, as my son described it to me this morning, a methane bomb. When we are establishing a policy around protected areas, we are going to have to struggle with that issue. Unfortunately, from a science point of view, we understand very little about it, because we have very poor information and poor data.

There are solutions that are possible in protected areas by using different management techniques, such as biodegradable roads and wetland mitigation banking systems, that have been set up and that are pervasive in the U.S., and so on.

Finally, on the agricultural side, we know that agriculture contributes currently about 10% to our emissions in Canada, and much of that is concentrated in the prairie provinces. We do have to look at that, at the land uses that we undertake, and particularly at the use of fossil fuel-based fertilizers, animals, and what to do about methane.

There are a number of things that could be done. You may be aware of no-tillage policies, biochars, and more examination of “close to nature” agriculture. I do see in all these three areas that there are solutions. Let me emphasize that—and I'm dealing with this on an almost daily basis now—the future management of many of these national areas and protected areas has to be with aboriginal communities. Maybe, because I'm based in British Columbia, it's more intense here, but from what I heard on the call today, it's equally important in all the northern regions.

What do I recommend then in closing? We have to see these forests and wetlands as managed landscapes. Protected areas where you say there is no management is probably a figment of our imagination, and the aboriginal groups I've worked with don't look at parks as protected areas the same way as some environmental NGOs. I'm supporting them in saying we have to manage. I don't think the way we managed in the past is the way we want to move forward in the future, particularly if we want to meet our obligations for climate change.

I want to say that there is also a lot scope in development, and I guess this is where the universities play a role. Information technology, and what I would call bioengineering technology, could provide us with much cleaner solutions than we have looked at today.

Finally, because of my economics background, I want to say that one of the things that needs to be done in decision-making is to create what we call marginal abatement cost curves. That means we're going to have to rank projects and technologies, and decide how we should best spend our money. Unfortunately, in Canada, we're still behind on this. We don't have good marginal abatement costers yet, but I would tell you that from all the analysis I've done over the years, biological solutions are often much more cost effective than engineering solutions.

●(1620)

I'm not saying it's either-or, but I'm saying to please consider that in these protected landscapes they are part of the solution to the climate change problem from a biological point of view.

Thank you.

**The Chair:** Gary Bull, thank you very much for that.

We have one more witness, who is Jeremy Pittman. You're up.

**Mr. Jeremy Pittman (Fellow, Liber Ero Fellowship Program, University of Waterloo, As an Individual):** Thank you.

As Debbie was saying, my name is Jeremy Pittman. I'm a post-doctoral fellow at the University of Waterloo. I'm part of what's known as the Liber Ero fellowship program. That's an emerging network of young scholars across Canada doing post-doctoral research that's focused on conservation.

I want to thank you all for having me today, and thank the speakers who came before me for excellent presentations.

A bit about myself and what I study. The overarching question I look at is prairie-focused about how to promote sustainable landscapes in prairie spaces. More specifically, I'm from the province of Saskatchewan. I look in the southern part of Saskatchewan at how agricultural landscapes can become sustainable.

I consider the social aspects, and what I mean by that are the people, the ranchers, the farmers who earn their living from these landscapes, the sorts of things that influence their decisions and the sorts of things that matter to them. But I also consider ecological aspects, for example, how species move across landscapes, how different risks, invasive species, things like that—weeds—essentially move across landscapes. Most importantly, how can we integrate them together for the benefit of both? I take both into account and think about these things simultaneously as both social and ecological.

As a very important part of my work, I spend a lot of time in rural Saskatchewan speaking with producers, walking around their properties with them, getting a sense of how they see landscapes, what's important to them, and just really trying to understand their experiences and how they've addressed changing social and environmental conditions, and also how they see conservation fitting within their land management.

I'll speak a little about the problem of context. On the prairies, we're starting to recognize more the role of these private lands in advancing conservation of many species at risk. Some examples are the greater sage grouse; a fairly popular one, the burrowing owl, a very cute iconic species. Others are the Sprague's pipit, the swift fox, species like that. These lands play an increasingly recognized and increasingly important role in private lands' conservation, and essentially conservation in this context has become more of a friend to private landowners as something that's more approachable and something they can engage with more readily to help advance and spread conservation across the landscape.

Landowners make daily decisions that affect the conservation value of their properties, and we need to find more appropriate ways of engaging with them.

What's become apparent over the years has been a lot of history of environmental programs that have worked with varying degrees of success. One thing that I often hear from ranchers is this idea that they don't like prescriptions. They don't like things being determined

from the outside that influences what they are doing in their operations. Without considering their ideas, their values, in terms of how you do conservation, I actually run the risk of pushing them away from conservation, alienating them from the processes, decisions, and losing the value that their lands can provide to conservation.

However, I do see, within the Species at Risk Act, section 11 in particular, opportunities for improving how we do conservation on private lands. In particular, the idea of conservation partnerships or agreements is really important. I've done a lot of work with local grassroots NGOs. In the prairies' context, they have a lot of watershed stewardship organizations, farmers, ranchers, sometimes the oil and gas industry, just a broad range of stakeholders. These groups have a lot of capacity to actually do more than you think. As well, they can be an important vehicle and a way of bridging connections with local places, local people.

In a really broad sense, I would recommend as three components that idea of engaging, hearing what's happening in a way that's responsive to local needs and priorities, but also it's the idea of crafting or building tools in collaboration with these groups and then essentially empowering them to implement, take ownership of the programs, roll these things out across the landscape.

In doing that, I have three key messages about how this could become operational.

● (1625)

First, there needs to be a firm demonstration of a willingness to listen and understand local priorities.

With respect to conservation decisions, people choosing to do conservation on their lands happens in the broader context of everything else that they're trying to deal with. I've had many conversations with ranchers. It starts off about species at risk and ends up with them talking about their family, the future of their communities, and things like that. I recall walking across a pasture with a rancher. He was chatting about how he deals with year-to-year variations in the amount of rain, and the grass, and how he has been trying to deal with the variations in his income. One thing he made clear, though, was that he sticks in the game. He keeps ranching just because he wants to be able to teach his children how to ranch, the same way his mother and father taught him. Some things are like how to manage your grass when you move your cows, and how to make sure you have grass for next year. They are simple but really important things, which he wants to pass on.

On that point, I propose that we can improve the success of some of these conservation partnerships by inherently recognizing from the beginning that conservation happens in this broader mix of priorities and different challenges that producers are facing.



In terms of empowering local people, conservation partnerships can be one of the best ways of fostering this kind of alignment with local values and local perspectives. In rural Saskatchewan, at the moment, there's some experimentation, some test pilots, with an interesting way of engaging with producers. We call it a results-based agreement, where essentially the habitat target that you're trying to meet is predetermined. Producers are allowed to meet that target however they see fit, so they can do what they want, that sort of thing. At the end of the year, at a set period, if they've met that target, based on some monitoring, that would trigger a payment or some sort of incentive to provide some recognition of what they're doing for conservation. At the same time, it gives them the flexibility to get there however they need to.

The final point that I want to touch on here today and something that I think is important is the idea that these partnerships can be a way of encouraging continual learning and improvement regarding conservation and sustainability in general on these landscapes.

I know of one older rancher in particular who spends hours a day researching sage grouse, and these sorts of things. He puts a lot of time into understanding the ecology of these species. He has friends who are scientists at Environment Canada who he'll engage with just to get the latest on what we think about Sprague's pipit, and stuff like that. Partnerships can be a way of using this desire and this drive to learn to help advance some of the best science in terms of what we know of conservation in prairie landscapes.

Thank you.

• (1630)

**The Chair:** Thank you very much. That certainly feeds into the trip we took out west and that meeting with Buckley's ranch. There's a similar kind of interest in making sure that there's a future and finding a way to share the resources with species that need to potentially move through his land. It impacts on the success of his ranch, and there's the question of how we manage that, so thank you for this.

**Mr. Jeremy Pittman:** Thanks.

**The Chair:** We're opening up for questions. We'll start with Will Amos, if he is ready.

**Ms. Cathy Towtongie:** Madam Chair, I forgot one comment.

**The Chair:** Yes?

**Ms. Cathy Towtongie:** I was at the Paris agreement with Canada, and in Nunavut we are actually getting pelicans from the Amazon. The Antarctica vortex is holding, but in our part of the world, 30% of our sea ice has receded.

Plus, when we refer to elders, we refer to them as traditional knowledge holders, not just elders physically getting old, but with the ability to transmit the total cosmology, environment, and weather that they inhabit.

I just want to say to Canada and to you that when we speak of conservation, it's crucial to know that icebergs are receding at a very fast pace.

Thank you.

**The Chair:** Thank you very much for that. You may not have been following all of the work of the committee so far, but we have

had a wonderful opportunity to meet with many first nations. They are reflecting those comments, that elders are the holders of past knowledge. We recognize that our future depends on building on that and working with you in partnership going forward and that we cannot go forward without that partnership, so thank you.

**Ms. Cathy Towtongie:** I believe it's new knowledge, not just past knowledge. For Inuit, when we speak of the snow and ice and the reading of it, we have lost some lives because of the misreading, but more importantly, because of forest fires, we're getting grizzlies, we're getting insects, we're getting pelicans, all these animals we've never had before.

Thank you so much for your comment.

*Qujannamiik.*

**The Chair:** Thank you.

Mr. Amos.

**Mr. William Amos (Pontiac, Lib.):** Thank you, Madam Chair, and thank you to all of our witnesses, by phone, video, and here in person. *Meegwetch* for your presentations.

First, I'd like to explore the idea that NTI has articulated around the need for IIBAs prior to the conclusion of agreements around new protected areas.

I should mention that it's a pleasure to see Mr. Uviluq here, having met him when we were both wearing different hats at the University of Ottawa.

Is it NTI's position that these IIBAs that would be negotiated in relation to protected areas would be public? Would the terms and conditions of such IIBAs be public?

**Mr. Bruce Uviluq (Legal Negotiator, Nunavut Tunngavik Inc.):** Absolutely. Because of the IIBA requirement, it's an obligation that the federal government has to do before an IIBA is done. It is public and we look forward to publishing those. There are some existing IIBAs for protected areas, and government is actually in breach of some protected areas right now. We're also working with them on establishing new IIBAs for protected areas, regarding marine protected areas.

• (1635)

**Mr. William Amos:** The letter that was sent to Minister Bennett on September 13 clearly outlines frustration with the federal government in relation to the implementation of past IIBAs. I'm not sure if all our committee members are aware of the long-standing litigation that the NTI was involved in with the federal government around, for example, the completion of environmental monitoring programs. If it's that experience, I wonder if you could describe that litigation a little bit and how it has coloured your perception of how the federal government should behave in the context of signing new IIBAs and creating new parks.

The sense I'm getting is that you're interested in new protected areas and you're interested in the federal government being an equal partner with the Inuit. However, past experience in the fulfillment of the terms and conditions of these IIBAs has been so frustrating to the Inuit that there's a certain reticence. I wonder if you could speak to that.

**Mr. Qilak Kusugak (Director of Implementation, Nunavut Tunngavik Inc.):** I suppose there is a lot of that. The lawsuit brought us to a certain point. The lawsuit existed for a reason. The reason was that we didn't feel at NTI that the federal government was holding up its end of the bargain.

At this stage, you're right, we have taken the time to review our past experiences, good and bad, which were relatively new in a lot of areas at those times. We were able to extract some of the positive experiences but also to recognize many of our challenges along the way.

Not complying with or not implementing obligations is a major hurdle for us. It's hard to swallow; it's hard to move forward when past obligations have not been met. We've had discussions on marine protected areas. We're stretching ourselves a little thin to have those discussions when we're also fighting on the front of trying to encourage government to meet those previous obligations. On top of that, we have funding issues, issues with the way in which IIBAs are funded.

I would like to state that IIBAs are really not what we do. We do IIBAs that are protected under the Nunavut agreement and the Constitution. It's important for us to have confidence that our partners at the federal level are willing to engage in proactive discussions as well as being able to rectify previous issues.

We have discussions on national historic sites; that is a current issue that we have. Then, going back to the funding issue, the sheer administrative burden that contribution agreements place on our finance departments simply does not make sense to us. We know and should indicate to you that we're a low-risk organization to work with.

I hope I answered your question. I got the red card from the chair.  
• (1640)

**The Chair:** Yes, I'm sorry. We have six minutes for each questioner.

Thank you for that. I know there's lots more to be said, but we have to move to Mr. Fast.

**Hon. Ed Fast:** Thank you. My questions will be directed to Professor Bull.

If you don't have an answer to my questions, please let me know and I'll move on to the next one.

My first question is, is there any peer-reviewed literature or science that has measured Canada's capacity to use its wetlands, farmlands, grasslands, forests to sequester carbon?

**Mr. Gary Bull:** Peer-reviewed? Yes, there would be some. It's spotty. Certainly there's been a strong team within the federal government that has tried to address this question, led out of the

Canadian forest service, with a whole team of people on carbon accounting.

They have made a lot of progress. I think some of their analysis is very good. I would point you to some of that.

**Hon. Ed Fast:** —to what that research might have—?

**Mr. Gary Bull:** For example, they have a Canadian carbon budget model. Many papers have come out of the Canadian forest service. One of the lead authors is Dr. Werner Kurz.

The big hole in the analysis, and they would readily admit it, is on all the wetlands and all the carbon stored in the wetlands, which as I mentioned comprise 12% of the land base, which is very significant, and also in soils in general. It's very complex to deal with soil carbon.

Yes, I would say that on the tree side we have lots of material to work with, but on the soils and the wetlands there's a lot more to be done.

**Hon. Ed Fast:** It's one thing to actually account for our existing capacity to sequester carbon in our natural landscapes. It's quite another then to take it to the next step and say what we can do to enhance that capacity.

In your opinion, by applying—you called them new management strategies, you referred to them as bio-engineering technologies—is it possible to apply those in a manner that would actually allow us to increase our capacity beyond simply protecting our current capacity?

**Mr. Gary Bull:** The answer is yes, I would say. I've been working with geneticists for the last eight years on different tree breeding techniques, and I can easily demonstrate for most of the boreal forest, for example, that with good tree breeding programs and putting the right tree on the right site, we could probably get a 30% gain in growth. The gain in growth then converts into increased carbon sequester.

**Hon. Ed Fast:** Is it true that younger trees sequester more carbon than older trees, or is that just a canard?

**Mr. Gary Bull:** Younger trees grow faster, which means they sequester more. So yes, younger trees, maybe not when they're babies but, say, in 10 years to 50 years, they would be sequestering quickly.

**Hon. Ed Fast:** Are you familiar with any international efforts to quantify and attribute to each country its contribution to sequestering carbon?

**Mr. Gary Bull:** Yes. It's not all housed in one place. I work with European researchers through the International Institute for Applied Systems Analysis, so they would do the 28 European countries. The U.S. Forest Service would do the equivalent in the U.S. Various people try to tackle the tropical world, so it's not as if it's all housed in one place, although institutions like the UN FAO try to bring it together into some global statistics.

**Hon. Ed Fast:** Thank you.

Beyond tree breeding, you referred to a broader set of management strategies, new management strategies that should be brought to bear on our natural landscapes to protect and improve their capacity to sequester carbon. Can you get into more detail as to what those strategies might entail?

**Mr. Gary Bull:** I can briefly touch on a few. Obviously, on the trees side, we could reduce losses to fire, insect, and disease. Again, this is where genomics comes into play. I work actively with Genome Canada on some of these problems. For example, we have now found a way to breed for resistance in a spruce weevil, that means suddenly we're no longer facing that same attack that we did 20 years ago. My researcher colleagues—

• (1645)

**The Chair:** Mr. Bull, you have 30 seconds left, I'm sorry.

**Mr. Gary Bull:** Okay, I'll stop there.

The same can be said on the disease losses, then of course we can increase growth through different strategies with biochar, with fertilization, a whole bunch of things that could be done to increase growth and reduce losses at the same time. It's a broad spectrum of things that could happen.

**The Chair:** Before we go to the next person, I'd like some clarification. You mentioned in your testimony that young trees sequester more carbon, but is it not true that larger trees add more volume and therefore, in essence, actually older trees, or sort of in that mid-range, would be sequestering more carbon than a young tree because of the volume that—

**Mr. Gary Bull:** We distinguish between sequestering and storage. What you're referring to in the old trees is that they are storing more carbon. That is also legitimate, and has to be brought into the carbon accounting to figure out the best and smartest ways for us to meet our targets in climate change.

**The Chair:** Thanks so much for that clarification.

Mr. Stetski.

**Mr. Wayne Stetski (Kootenay—Columbia, NDP):** Thank you all for being here. I was born in Churchill and I started school at Chesterville Inlet, so I'm going to start with Nunavut.

Obviously there's a number of issues that needed to be sorted through, but in general do you think it's the right thing to set aside more land and water under protected status?

**Ms. Cathy Towtongie:** Thank you for that question, Wayne. As president of Nunavut Tunngavik Inc....Inuit, we are the largest private landholders in the world for Nunavut, and we are quite capable of setting aside protected areas and determining which ones we want protected. Right now we hold, I believe, 25% of the natural gas for Canada. We are quite capable of being involved with the committee because our area has no trees so the rush and the time management of this committee for me, politely, is not acceptable.

I flew two days to get here because it was so crucial and important. On our land mass we have permafrost, climate change. We want to be involved in decision-making and in actually advising Canada where Nunavut could have protected areas and conservation areas because we do have polar bears and we have narwhals, which you do not have. The comparison between first nations.... We pay

taxes. That is not acceptable. Our territory is very different. In our situation we have icebergs, melting ice, we are experiencing it.

I'm giving it to Bruce. I'm really shortening that.

Thank you, Madam Chair.

**Mr. Wayne Stetski:** There's a follow-up question, Bruce, if you could also answer it. You said that the government was in breach of some existing protected areas. I'm interested in how it's in breach as well.

**Mr. Bruce Uviluq:** It's important to note that Nunavut represents one-fifth of the land mass of Canada. I just wrote down a list of the current protected areas that we have. Just quickly to name them, we have eight migratory bird sanctuaries, five national wildlife areas, six national parks, the Lancaster Sound National Marine Conservation Area, the Northwest Passage, six territorial parks. The two that are in breach are in heritage rivers and the 13 historic sites—two of which are very publicly known, the *Terror* and *Erebus*, which our president mentioned earlier—and also we are negotiating marine conservation areas in the future.

With that being said, in one-fifth of the land mass of Canada we do have a lot of potential for protected areas and the largest migratory bird sanctuary in the world is located in the Kitikmeot Region in the Queen Maud Gulf. The migratory bird sanctuary is larger than P.E.I. That's one of 13. So there is potential for more protected areas and Inuit will choose those, and that's what is laid out in our land claim agreement.

Also, on the other side too is that we have two existing mines and there were three that were recently turned down, including the uranium mine near Baker Lake, which went under an impact review board, and the Inuit said no and it didn't happen.

There were two other ones that were recently noted where there were no major developments because of what the land claim agreement says. So I think there is a great opportunity for those and we look forward to working with Canada on establishing new protected areas, but they'll be under the land claim agreement, and that shows where the boundaries will be chosen and this kind of thing. So definitely there is an opportunity.

• (1650)

**Mr. Wayne Stetski:** Thank you.

**Mr. Bruce Uviluq:** The last question was about the two in breach?

**Mr. Wayne Stetski:** Yes, what are the breaches?

**Mr. Bruce Uviluq:** The agreement says that an impact and benefit agreement is to be negotiated for any protected area, and there were a number of protected areas already in existence when the land claim agreement was signed in 1993. So the land claim agreement said that these protected areas must have impact and benefit agreements by 1998, and that time is long since past. So those are for the heritage rivers and the historic sites.

I think that we're in a unique situation where the government is freshly out of our settling the \$1-billion lawsuit, which we settled out of court two years ago for \$255 million. So I think the government is aware that when it's in breach—and recent case law supports this—the breachee can sue for damages. We got that a little while ago. It's there, it's in place. We've been trying to work with the federal government on these impact and benefit agreements, but it's just not happening.

Just in addition, a final point is what you have in front of you on recommendation number one is that we need a new concerted approach on the approach of funding, implementing, and negotiating constitutionally protected land claim agreement provisions. I think that the government is on the way. We see this with the mandate letters, but also the cabinet directive on modern treaties that was established by the federal government.

**The Chair:** Thank you very much. Yes, you're out of time, sorry.

**Mr. Wayne Stetski:** We'll get a second round.

**The Chair:** Well, I'm hoping so.

Mr. Aldag.

**Mr. John Aldag (Cloverdale—Langley City, Lib.):** Thank you.

Mr. Uviluq, when my colleague, Mr. Amos, was finishing up his question, it looked like you were going to jump in. Did you have a thought that you ran out of time on that you wanted to share?

**Mr. Bruce Uviluq:** Yes, absolutely. Thank you. It was based on the last point. I think the government is realizing that it can no longer shirk its constitutionally protected land claim agreement obligations, and so we're heading in a positive direction. We hope to see some positive movement on these two agreements that are in breach now, that Qilak is working on. From Cathy's comments, too, I think that we want to see these protected areas happen. Inuit are the best stewards of the environment and the wildlife, and we just want to see the land claim agreement followed. I think that those recommendations encompass the things that we're looking for, and it's time for the government to start realizing that and to start implementing these land claim agreements. It will be beneficial for the Inuit, for Canada, and for the rest of the world.

•(1655)

**Mr. John Aldag:** Okay.

While you're at the microphone, I'm curious as to the idea you raised about the national historic sites. That's something new that's come up. Could you give a bit of an explanation? Are these land-based historic sites? Are they a national designation?

**Mr. Bruce Uviluq:** Our agreement says that they're any protected areas in this negotiated impact and benefit agreement. These are there. The problem is that—

**Mr. John Aldag:** Sorry, would they have predated the creation of Nunavut?

**Mr. Bruce Uviluq:** Yes.

**Mr. John Aldag:** They would have been inherited from when the territory was created in 1999?

**Mr. Bruce Uviluq:** Yes.

**Mr. John Aldag:** Okay. So there's still work that needs to be dealt with.

**Mr. Bruce Uviluq:** Yes. We know that the government spends \$28 billion a year on grants and contribution agreements for government programs and services. Typically, our land claim agreement obligations have been lumped into these contribution agreements. We don't feel that land claim obligations should be treated as a government program and service. For example, a marine biologist and three other scientists who are travelling up to Grise Fiord to study the eggshell thicknesses of thick-billed murres need a contribution agreement of \$100,000. You need to make sure that they're spending the money on that process, and that they're not going to Las Vegas. It's about transparency, accountability, that kind of thing. Our agreement was signed in 1993. Canada knew of all the obligations that it was getting into. We are not opposed to audits and reporting requirements, but we don't see the need to jump through all the hoops and onerous administrative requirements of contributions agreements. Those are the reasons why we haven't been able to sign these agreements with the Government of Canada.

**Mr. John Aldag:** Okay. Still.

**The Chair:** You have two and a half minutes.

**Mr. John Aldag:** Okay.

Is Mr. Smith still on the line?

**The Chair:** Yes. I was hoping someone was going to ask. He's still on the line and patiently waiting for a question, I think.

**Mr. John Aldag:** Okay.

Mr. Smith, I was curious when in your discussions you outlined a number of accomplishments related to protected areas, national parks, national marine conservation areas or other marine conservation areas. You mentioned one that seemed to be under negotiation. I just want you to give a sense of what's happening there. Are there other opportunities within the Inuvialuit settlement area for protected areas, and what are the obstacles to moving that forward?

**Mr. Duane Smith:** In reference to that MPA that's under development, that's exactly where it's at. We're trying to finalize it. The terms are there. The concern we have is the lack of adequate resources being applied from the federal end of things to document our traditional Inuvialuit knowledge on the area, as well as to develop a consistent monitoring process to ensure the viability and the sustainability of this marine protected area over the long term. There won't be any other MPAs that we would agree to within our region unless there are adequate resources and justification for these things in the future. Our use and our knowledge are key and crucial parts of any of these moving forward, as well as of the review. With the changing ecosystem that we're experiencing within this region, we need to ensure that these MPAs continue to live up to their objective and their mandate. If they aren't, then what is the purpose of maintaining these things when the ecosystem that they were intended to protect has moved away?

**Mr. John Aldag:** I'm going to get the red flag here soon.

**The Chair:** You have 10 seconds.

**Mr. John Aldag:** What department or who do you deal with primarily on this MPA initiative?

**Mr. Duane Smith:** We're dealing with the Department of Fisheries and Oceans on this case right now. Actually, as I speak, I'm the co-chair of the Beaufort Sea Partnership, which has been in place for close to two decades. We're just starting our meetings, which I'm absent from at this time. About 40 different government departments, agencies, academia, and our organization are part of this Beaufort Sea Partnership.

• (1700)

**The Chair:** Thank you for being here with us.

Go ahead, Mr. Fast.

**Hon. Ed Fast:** Thank you.

Professor Bull, I think you got cut off as you were expounding upon some of the management strategies that you would employ.

Before I give you that opportunity, are you able to quantify in very real terms, either by percentage or otherwise, how much of the carbon that Canada produces is actually sequestered in our natural environment?

**Mr. Gary Bull:** I don't have that number in my head, but I can tell you that there's certainly far more carbon stored in the existing forests than we expend every year, and the potential is there for us to essentially, within biological systems, offset all of the emissions that we produce in Canada.

That's in theory, now. So then it's an economic problem, in terms of making choices around how we best allocate resources to deal with our climate change challenges. That's why I've argued that we need to develop these things called marginal abatement cost curves.

On the management strategies, what I'm suggesting is essentially that we behave more like Europeans in a sense. If I took you to a similar forest in Sweden as I do in Canada and showed you how they manage it, you'd see that what they do is put a lot more emphasis on the reduction of insects, fire, and disease; increases in growth; and use of thinnings and so on to produce bioenergy. This is something I

personally work on quite a bit, how they are making the switch and managing forests to reduce the reliance on fossil fuels.

There's a whole suite of things a manager can do. The issue always becomes the cost and making sure it's an efficient solution.

**Hon. Ed Fast:** I'll give the rest of my time to Mr. Eglinski.

**Mr. Jim Eglinski (Yellowhead, CPC):** Thank you.

Professor Bull, I want to follow through on something you mentioned earlier during your presentation, about our forests being attacked by such things as pine beetles and stuff like that. I don't know if you referred to pine beetles, but you did say beetles.

Living in B.C. for many years and now living in Alberta, I've seen the pine beetle effects in British Columbia and am now seeing them through Jasper National Park and coming into the western slopes of Alberta.

Now, from some reading I was doing through Canadian forest service publications, I've learned that we're basically taking the forests that were a small net carbon sink and turning them into a large net carbon source. I understand that some of the impacts in one year alone from B.C. are equivalent to the amount of forest fire situations we had over a 20- or 30-year period in carbon and stuff like that.

I wonder if you could just elaborate on that a little, and tell me what we could do as a government or what we could do to try to improve that.

**Mr. Gary Bull:** I think we should probably revisit some efforts the federal government made 20 or 30 years ago when it came to realizing that forest resources are important to us and we need to invest in them. As I mentioned, and this goes back to my early days as a graduate student, there were large programs and up \$1 billion allocated to helping out in provinces such as New Brunswick after the spruce budworm outbreak, and those dollars were invested back into forests.

What we recognize today that's different from 20 or 30 years ago is that these forests not only produce jobs and a livelihood, trees to make houses, and so on, but now they add this additional dimension, which is helping us mitigate and deal with the climate change problem. In our calculations and our international commitments, this adds a whole other reason for us to revisit how we invest in the forest landscape. These outbreaks of pine beetles, spruce beetles, and spruce budworms—and by the way, New Brunswick is going to get attacked again—are ongoing concerns and we just need to be a lot more active in our management strategies than we have been in the last 20 years.

• (1705)

**Mr. Jim Eglinski:** I believe I have about 30 seconds left.

Do you believe this is a provincial matter or is it a national matter at this time, taking into consideration the way the pine beetle is moving east?

**Mr. Gary Bull:** I think it's a national matter and the provinces need a partnership role in that. Importantly, aboriginal communities need a partnership role in this, because a lot of the management strategies that I see moving forward are consistent with the aboriginal approach to managing the landscape.

**The Chair:** Thank you very much.

Mr. Fisher.

**Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.):** Thank you, Madam Chair; and thank you very much to all you folks for being here today. You're providing an awful lot of detail, an awful lot of knowledge, and I apologize if I don't absorb all of it. It's not an easy thing to do.

I want to go to Duane, if I could, and touch again on the MPAs that Mr. Aldag spoke about a bit.

I'm interested, Duane, in your experience in dealing with the government on the first MPA that you now successfully have and the newest one. Are they years apart, are they decades apart, or are they working parallel with each other?

**Mr. Duane Smith:** They're at least a decade apart. Actually, the Inuvialuit set up the first one ourselves. When I say that I mean we established an MOU with industry not to do any activity within that area because it was a sensitive beluga habitat for their calving and their moulting. So they agreed to that, and the federal government eventually came around to see that it was working between ourselves and industry and began to work with us to develop the criteria for the official recognition and establishment of this MPA for that habitat. It works as well as it can. Our local hunters and trappers committees work with the researchers so that both sciences are documenting and providing data and information to ensure the sustainability of that MPA.

I should point out that, in listening to some of the discussion, there needs to be a recognition of the shoreline erosion that's taking place in my region at the very least and the amount of carbon dioxide, as well as methane gas, that's being emitted into the atmosphere as a result. Across Canada, people don't seem to realize that this massive shoreline erosion is taking place.

**Mr. Darren Fisher:** Okay, thanks Duane.

I'll go to Professor Bull for a quick second here.

Again, going back to my earlier comment about not necessarily understanding all the little things that you threw out when you were speaking, you talked about biological solutions versus engineered solutions. Could you just expand a little on what you meant when you were comparing the two and which one was better for certain things? I wrote that down when you said it and I didn't really understand the context.

**Mr. Gary Bull:** Quite often, and you can see this in our education system, engineers will come up with a different solution than a biologist. I'm an applied biologist. It means if I want to deal with, say, emissions coming out of a smokestack, I can put in a scrubber and clean up all the emissions, or I could plant more trees. I can plant trees probably for about \$5 a tonne CO<sub>2</sub>e. Our carbon capture and storage project is north of \$120 a tonne CO<sub>2</sub>e. As a society we have to make that difficult decision about how we best allocate our scarce dollars to get to a solution.

I'm arguing that too often we've been striving with this climate change issue to just find engineering solutions and not looking at how the natural environment—forest, agriculture, and wetlands—play a pivotal role, especially in a vast country like Canada. We can't ignore it because if we find all the engineering solutions and reduce emissions to zero, our natural ecosystems are going to emit as much as we do as humans in our economic activity.

That's what I mean. We have to address biological solutions in concert with engineering solutions.

• (1710)

**Mr. Darren Fisher:** Thank you. If I have any time left, Madam Chair, I'll give it to Mr. Amos.

**The Chair:** You have a minute and a half.

**Mr. William Amos:** Thank you.

Mr. Smith and Ms. Towtongie, as Mr. Smith may recall, I worked for many years as legal counsel to a wildlife fund on the issue of Arctic offshore drilling. I'm interested in getting NTI's and the Inuvialuits' perspective on whether we should continue to have a system whereby INAC accords exploration rights prior to the establishment of protected areas. I wonder if these two Inuit organizations would provide us their position on this issue.

Do they think that areas should be conserved collaboratively between Inuit rights-holding bodies and the federal government prior to determination of the issuance of exploratory rights? Obviously in the case of Nunavut this has brought us to the point of litigation that is going to the Supreme Court. But in the case of the Beaufort Sea it brought us to the point of a rather large-scale, deepwater offshore drilling project, which was subsequently abandoned by Imperial.

**The Chair:** We've got fewer than 30 seconds for the answers, sorry.

**Ms. Cathy Towtongie:** Duane, I'll let you answer first and I'll answer later.

**Mr. Duane Smith:** Thank you, Cathy.

Very quickly, it hasn't been abandoned. Planning is still in process. What you're suggesting is large-scale, regional, cumulative management approaches.

Under our land claims, these activities have to be done in concert with us anyway, and I think you're fully aware that any development activities have to take into consideration their potential impact on the ecosystem. Environmental assessments have to be done in that regard. I'm not suggesting that MPAs have to come before development; I'm saying that under our land claim process at the very least that has to be taken into consideration to begin with and weighed prior to any development activity proceeding.

**The Chair:** We've run out of time on that questioning. Cathy, I'm sorry but it's very strict. I'm running by standing orders so I can't do that without agreement. We'll get back to the rest of that one, I think.

Mr. Shields.

**Mr. Martin Shields (Bow River, CPC):** Thank you, Madam Chair.

Thank you to the witnesses today.

I have a quick question for our short-grass expert here. John Palliser in 1840 wrote a report and said nobody should ever live out there because it was a desert. Obviously a lot of people are out there.

When you look at the barriers in the sense that we have ranchers out there who have learned to be conservationists.... I know you've highlighted some things, but what are the barriers for that going on?

**Mr. Jeremy Pittman:** To maintain into the future?

**Mr. Martin Shields:** Yes, you've sent some solutions here, but what are the barriers?

**Mr. Jeremy Pittman:** There are definitely some barriers. These rural areas are depopulating. These ranchers are facing— sometimes it's pretty tough to get a good price for your beef and that sort of thing.

When you think about farming communities...my parents still farm out there. We're usually pretty dry. It was extremely wet this year. We got one bushel an acre of lentils. We usually get about 20 or 30 and that sort of thing. Our wheat was graded so low my dad didn't even know that the grade existed. It was called commercial salvage, so basically you can't sell it.

The climate out there is extremely variable. It's the sort of thing that we've learned to adapt to over time. Looking to the future, climate change does pose a risk here and these sorts of extremes are what's expected. In an already variable climate, you're expecting the risks from both excessive moisture and drought to increase, and then you're overlaying that with the general economic uncertainties and just population uncertainties associated with the area.

• (1715)

**Mr. Martin Shields:** Then the conservation comes with adaptability?

**Mr. Jeremy Pittman:** I would say so. Some of the grasslands were out there before we broke it for agriculture. They've potentially gone through some of these changes before in the past and they can provide capacity to help go through them in the future.

**Mr. Martin Shields:** Thank you.

My next question is for Professor Bull. Being an old guy, we talk about what you said about indigenous behaviours with the landscape. With forests, one of the things that I remember was, having grown up beside the foothills and forests, that trees grew, and we didn't have fires, but if we did, we kept the fires from growing. They'd say, well the indigenous peoples know how to take care of that because they'd periodically burn them down to get certain things that they wanted to use in their cultures.

It alluded to the fact that the natural process of burning the undergrowth, the carbon storage, and it took care of the insects and

disease. Is that what you're referring to, going back to how it was once done?

**Mr. Gary Bull:** What I'm suggesting is that fire management by aboriginal peoples, historically of course, was when they were nomadic. We heard from, I think, Cathy earlier in the conversation, that a nomadic people would—in the thousands of years of history of this—set fires after they used a certain area to help in restoring the ecosystem.

I'm not suggesting for a moment that there's no fires, but we are clearly in a different time. We have communities that are very fearful of fires, so we are doing fireproofing of communities and so on.

However, fire management will become, in my view, far more sophisticated and we will have far fewer uncontrolled fires, which are hotter and emit a lot more emissions. I think what I'm suggesting is the tool will be used differently and it can be consistent with aboriginal aspirations, but it won't be used in the same way as it was prior to the immigrant population entering Canada.

**Mr. Martin Shields:** You also mentioned Sweden and the farming mechanism, sort of an agricultural process for forests. I have seen some examples of that in Oregon, in areas that weren't forested where it is really tree farming by the thousands and thousands of acres. Are you looking for us to be more in that type of a process, as in Sweden and what I've seen in some places in the States?

**Mr. Gary Bull:** I think that it would be appropriate in a limited amount. We do have private companies operating like this, for example, on Vancouver Island right now. I would say that we are going to have to be judicious and smart. We will, in some cases if the land is right, become tree farmers and be more focused if we want to participate in a forest sector, yes.

**Mr. Martin Shields:** You mentioned methane. What sources of methane gas do we have?

**Mr. Gary Bull:** Animals, of course. In countries like New Zealand, the biggest source of methane is from livestock. Of course, there have been experiments in Alberta where they try to reduce methane gas from livestock production by changing feed, for example.

**Mr. Martin Shields:** What about the sources of reservoirs and dams?

**Mr. Gary Bull:** Reservoirs and dams, that's another good point. I think this is the conversation going on in Labrador at the moment about Muskrat Falls, to remove the biological material. It's not just methane, of course. In that case, I think, the conversation is about mercury.

Yes, there are things we can do—

• (1720)

**Mr. Martin Shields:** That's a large number, in the reservoirs and dams, I understand.

**Mr. Gary Bull:** Yes, it can be. I agree.

**The Chair:** Thank you very much.

Mr. Bossio, go ahead.

Do you want to flip this over?

**Mr. Mike Bossio (Hastings—Lennox and Addington, Lib.):** Sure, I will flip this over to Will.

**The Chair:** Do you want to go back?

**Mr. William Amos:** Yes. I want to go back and give Ms. Towtongie an opportunity to answer the question of which comes first, in their opinion. Should we be changing the federal law that enables exploration rights to be granted, prior to having gone through the exercise of a full-scale conservation initiative?

**Ms. Cathy Towtongie:** The people I represent are hunters and trappers. On Baffin Island we put a moratorium on caribou, because we saw the herds declining. We rely heavily on the animal population, not only for our food but for our clothing. Therefore, when Canada wants to put out exploration permits, they have a duty to consult.

When permits are handed out without our input, you get cases like Clyde River, where seismic becomes an issue. In that area, you have the bullhead calving grounds. There are a lot of other situations—sea mammals, such as narwhals, which southern Canada does not have—that we have to pay attention to.

We have the best management system in the world for animals, but we get concerned when we see other first nations or other aboriginal groups overhunting. We have to maintain a balance with the environment, the ecosystem.

In the Paris talks agreement, Canada gave \$22 billion over 10 years for climate change to non-industrialized countries. The Arctic should be considered a non-industrialized country. Climate change is affecting us today.

When our sea oceans and our shorelines are eroding, we are flooding islands around the equator—seven times. One of the places is Tulum, and I met with the president of Tulum.

Canada, in and of itself, has to pay attention to Nunavut, to our homeland. Exploration permits cannot be focused on the profit bottom line. They have to be thought of in a creative, innovative way so that the wealth of the ocean is distributed properly. That's based on capitalism. How do we do it? How does Canada do it?

Canada is known as an extracting country for mine permits. If we had opened the uranium mine that we said no to, it would have given \$10 billion to the gross national product of this country, but we need time. How much time? Give us at least five to 10 years, so we can look at the industry. We want development to happen, but it has to be balanced with the sustainability of our environment.

When I come down here to the cities, the earth is not breathing. You have a lot of concrete, cement. You get floods and snows. That will increase, unless we see a sustainable management process in our country. I think that's realistic, and that's my expectation of this committee.

Thank you.

**Mr. William Amos:** I appreciate the comments, particularly around the need to resource conservation initiatives in light of climate change, and I think that our government is committed to that. I'd like to ask a follow-up question in that regard.

The submissions made by NTI are fairly clear. Past financial offerings, in terms of IIBAs, have been, in many circumstances, deemed wholly inadequate, a joke. Can you give us some sense of scale here? What are we looking at in order to achieve the 10% objectives we've set out? What kind of ballpark financing is necessary in order to achieve these IIBAs and allow for monitoring and for the traditional knowledge to be given its full value?

● (1725)

**Mr. Bruce Uviluq:** That's a good question. I think that to look forward is to look at what we have now in the migratory bird sanctuaries and national wildlife areas, in which we have an umbrella IIBA. For those 15 protected areas, we negotiated an agreement of \$8.3 million over seven years, from 2007 to 2014. The land claim agreement requires the IIBAs to be renegotiated every seven years. It was recently negotiated from 2014 to 2021 to the tune of \$9.2 million. I must stress that Nunavut is the only land claim agreement that has these comprehensive benefits, and we expect those to continue.

For the heritage rivers IIBA, which was undergoing conciliation, we were requesting a smaller amount because it's four heritage rivers. We requested \$4.5 million to \$5.5 million, but the government said no, because our mandate is less than half of that. So we could not establish those protected areas that went against what's constitutionally protected in our agreement. I would say that future agreements should look to what has been negotiated in the past.

We're negotiating with DFO right now for two to three marine protected areas to be in place before 2020. We haven't begun discussions on what the dollar amount is. With the letter of September 13 and the MOU we have with Canada, DFO is committed to working with us, involving Inuit, and having an adequate financial mandate. We're looking forward to working with DFO on that, but we're still looking at settling our breaches with the existing agreements.

**The Chair:** Thank you.

Mr. Stetski, you're up, and you're the last one.

**Mr. Wayne Stetski:** Mr. Pittman, when I left the north, we moved to a small farming town in southern Saskatchewan, and I certainly agree that a well-managed farm or ranch contributes a lot to conservation. I want to talk a little bit about community pastures. I want to know if you're aware of what's been happening with the federal government's divesting itself of very important grasslands in the province of Saskatchewan, which then turned around and sold them privately. Some of the lands that are still part of community pastures are extremely important for conservation. I'd be interested in your perspective on the whole initiative and how perhaps changing direction could help us reach our target of 10% protected land.

**Mr. Jeremy Pittman:** Yes, it's unfortunate that those lands were divested. There have been some interesting groups pop up to manage them, grazing co-ops and things like that. One thing that will be important moving forward is just making sure that they stay in native grass areas and permanent cover. I guess that would be my opinion on it.

**Mr. Wayne Stetski:** Thank you.



Mr. Smith, you mentioned in your presentation that you're now seeing a lot of pink salmon up your way. Generally, invasive species are considered bad. Are these pink salmon considered good or bad when they arrive up north?

**Mr. Duane Smith:** This is the first time it's been seen. We have had chum salmon in the past, but only sporadically. Now, though, almost every community in my region, and outside of it into Nunavut, has been harvesting these pink salmon. I don't think people will turn them away, but I they are taking over the traditional species habitat within these areas. It's something that's just emerging this fall. It's not the only invasive species we've seen in the marine ecosystem. There are others that have moved into the region as well.

• (1730)

**Mr. Wayne Stetski:** Going back to Nunavut, you talked earlier about wanting to see fishing regulations that are different from the ones DFO currently has in place. Could you describe how yours would be different from what is currently in place with DFO?

**Ms. Cathy Towtongie:** I met with the previous department of fisheries minister, Gail Shea, and with the NTI. We hired our own legal drafters on how we would see Nunavut fisheries regulations that would ensure lakes... Like Duane said, we're getting salmon in Arctic Bay, which is high High Arctic, and also along marine areas. Those regulations would be beneficial to both Canada and Nunavut. Where the differences lie, I don't have it on hand. But if we could work with the department of fisheries and if you could recommend those regulations to them—our drafters worked hard on them—we believe they are beneficial because we're dealing with invasive species and it has to be done. The sooner the better.

**The Chair:** Thank you very much.

I'm sorry. Some of our members have another committee that starts at 5:30 p.m., which is why I was quite strict in trying to get us to be able to have a full round, with everyone getting a second go but ending at 5:30 p.m.

Thank you very much for taking significant time to come down and share with us your experience. If you have anything that you think you can add to the discussion we've had here, please feel free to send it along. We'd love to have it. We are going to start drafting instructions on the report next week, so if there's anything that you think could help us, please send it through before next week. That would be very helpful.

Do realize that these are recommendations we're going to make to the government based on all of the great witness statements we've heard here, as well as the work we did when we went out west. It doesn't mean that this is the end. I almost see this as the beginning. This is the beginning of a framework that the government then needs to take forward. Please don't think that we're stopping. I see it as sort of the beginning of moving forward on how to get more protected spaces in a faster way, and in a more co-operative way with first nations.

Thanks again to all of you for being here.

The meeting is adjourned.

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