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Chair

Mr. Rodney Weston

Standing Committee on Fisheries and Oceans

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• (1105)

[English]

The Chair (Mr. Rodney Weston (Saint John, CPC)): I call this meeting to order.

I'd like to take this opportunity to welcome our guests here today and thank them for taking the time to come and meet with committee members to talk about the northern Arctic study we're embarking upon, and to give us some advice, some insight, and answer some questions that committee members might have.

Mr. Burden, I believe you're going to make a presentation to begin with. I'll ask that you take a moment to introduce your colleagues with you today. I think you've all been here before the committee. I welcome you back to the committee, and thank you very much, once again.

Any time you're ready, Mr. Burden, I'll let you take over.

Mr. David Burden (Acting Regional Director General, Central and Arctic Region, Department of Fisheries and Oceans): Thank you.

My name is David Burden. I'm the regional director general for the central and Arctic region. I have with me this morning my colleagues: Dave Gillis is the director general of ecosystems science here at headquarters; and Blair Hodgson will answer all the tough questions related to resource management in the Arctic.

[Translation]

Good morning everyone.

I want to thank you for the opportunity to help the committee as part of this discussion on Canada's northern and arctic fisheries.

I will make my presentation in English, but we will be able to answer your questions in both languages, as usual.

[English]

As this is the start of your study, we've put together a rather comprehensive deck for you that covers the five elements that you'll notice on slide 2. The first and most important one for anything related to our management in the Arctic is on the governance.

The northern land claim process has gone on for decades and has resulted in areas set aside for the benefit of traditional users.

The James Bay and Northern Quebec Agreement was the first agreement signed back in the 1970s—1975 to be exact. There followed a series of others, as you can see, across the north. The

most recent agreement was the Eeyou Marine Region Agreement in 2010.

There are some areas shown that are as yet not covered by finalized agreements. For example, in the Northwest Territories around Great Slave Lake, negotiations are ongoing with the Dehcho on the east side of Great Slave Lake.

The Nunavut Land Claims Agreement covers the largest surface area. It was signed back in 1993. Land claims have greatly influenced the way we decide and deliver our programs and services in the Arctic.

The land claim agreements created fisheries and/or wildlife management boards. In Nunavut, the Nunavut Wildlife Management Board deals with both fisheries and wildlife species and issues. In the Inuvialuit Final Agreement in the western Arctic, it's the Fisheries Joint Management Committee that deals with matters related to the fisheries.

The boards are typically described as the main instruments of fisheries or wildlife management in the settlement area. The co-management regime created by the claim basically insists that the government operate in ways that we don't see traditionally in the south. It makes for an integrated approach with our co-management partners. The way we do business is by consensus. In the past the government would have done this work on its own, unilaterally.

The land claim agreements insist that there is shared decision-making. This ensures, of course, that opinions are heard in a consultative process and that the decisions integrate traditional knowledge as well as our core science background knowledge. Having the beneficiaries part of the decision-making process makes it relevant to the circumstances for them, and it has added the benefit of giving ownership and community support for the decisions.

Turning to slide 5, fisheries play an important role in the lives of many northerners. The largest commercial fisheries in the north are located in the eastern Arctic, in the Davis and Hudson straits in Baffin Bay. In Nunavut, the main species harvested are Greenland halibut, or turbot, northern shrimp, and Arctic char.

The estimated value in 2005 to the Nunavut economy was \$12 million to \$14 million annually, and around 300 seasonal jobs were created. The potential landed value in 2007 for shrimp and Greenland halibut, for the Nunavut share, was approximately \$55 million, and that would be if the entire quota were harvested. At this point in time, they have not been able to catch their entire quota. Commercial sales of Arctic char in Nunavut are estimated to bring around \$1.2 million annually to the economy.

If we turn to slide 6 on the NAFO sub areas, Greenland halibut stocks are part of the shared stock between Greenland and Canada. While there's no formal agreement with Greenland for this fishery, Canada has traditionally claimed 50% of the overall total allowable catch.

The NAFO Scientific Council provides us with TAC recommendations on an annual basis. The commercial TAC currently is at 13,510, which is fish by enterprises based in Nunavut, Newfoundland, and the Maritimes.

- (1110)

The 0A TAC is provided exclusively to Nunavut through a special allocation to the Nunavut Wildlife Management Board on behalf of the Nunavut Inuit. The division 0B fishery includes harvesters from Nunavut, Newfoundland, Labrador, northern Quebec, and Nova Scotia. In addition, there's a 900-tonne competitive fixed gear quota, where four Nunavut enterprises have nine of the 22 licence validations.

Respecting Nunavut's special allocations, the Nunavut Wildlife Management Board provides suballocation decisions and recommendations to the minister for his approval. These adjacent fisheries are seen as economic development priorities for the Government of Nunavut and aboriginal groups. Nunavut's share of the adjacent Greenland halibut fisheries has grown over the past decade from 27% to 70% of the available quota. Nunavut interests continue to advocate for an 80% to 90% share of their adjacent resources.

In 2005 a separate management area was established inshore of the Cumberland Sound, with a 500-tonne total allowable harvest, and it is exclusively fished by the Nunavut Inuit.

Turning to slide 7 and looking at shrimp, shrimp fishing in areas 1, 2, and 3 is accessible to the 17 offshore licence-holders. As well, there are special allocations to Nunavut and Nunavik.

In 2011 industry received MSC certification for shrimp fisheries in the north. The SFA 1 TAC has been set at 11,333 tonnes for the coming fishing season in 2013. SFA 2 and SFA 3 are domestic stocks. In December of 2012 the minister approved shrimp management changes for SFA 2 and SFA 3 effective for the 2013-14 season. These new SFAs were put in place for management purposes of the total allowable catch. They are based on two distinct science survey assessment zones, one in the east and one in the west, and are distributed to the new management units as per the fixed sharing arrangement approved by the minister.

The decision-making process and sharing arrangements between Nunavut and Nunavik are still being worked on, and we hope to have that resolved in short while.

Current landed value for shrimp is just under \$3,000 per tonne. If Nunavut fished all of its available quota, the landed value would be in the area of \$32 million.

Turning to slide 8 and the central part of the north, Arctic char plays an important role in the nutrition and social and cultural aspects of the northern community. It fosters continuation of traditional culture and lifestyle, provision of traditional foods, and local self-sufficiency. The nutritional and cultural value of Arctic

char cannot be adequately and effectively replaced by southern foods.

In Cambridge Bay, the Arctic char fishery is the largest in Nunavut. It typically accounts for more than half of the commercial harvest of char.

Moving back to the east, on slide 9, and to Greenland halibut, the ice platform harvests over the winter have varied over the years due to the varying ice conditions that we find from winter to winter. Peak landings were seen this past year, with 304 tonnes landed so far this year. This fishery is starting to wind down as we're getting to the end of April and into May.

The fish plant is paying fishermen a rate of about \$1.30 a pound. Efforts are under way to continue to explore the development of a small vessel open water fishery to fully utilize and exploit the 500-tonne total allowable harvest.

Harvest of commercial Arctic char takes place in both winter and summer; however, the char harvested in the summer has a higher economic value. Accessibility due to proximity and weather—and that's proximity to markets and weather issues—to these water varieties, as well as market demand, dictate fishing efforts from year to year. Peak summer landings for char were seen in 2004 and 2005 at about 24 tonnes, but in the summer of 2012, the char landings were reported to be at about 14 tonnes.

The fish plant in Pangnirtung employs between 20 and 45 people, depending on the season. Of course, as you'll know from our previous discussions, the Pangnirtung small craft harbour will be opened in the summer of 2013.

On slide 10, we're looking to the Northwest Territories.

I'm sort of bouncing back and forth here. I apologize for that.

- (1115)

The Northwest Territories commercial fisheries are primarily based on whitefish, lake trout, pickerel, walleye, northern pike, and inconnu. The commercial fishing operations in the Northwest Territories are primarily carried out on inland and freshwater lakes. The largest and best example, of course, is the Great Slave Lake fishery. All fish are sold or marketed by the Freshwater Fish Marketing Corporation on behalf of the local fishers.

I'll give you slide 11 as a reference to the examples of the zones for the commercial fisheries on Great Slave Lake. While we're in the west, we'll talk a little about the fisheries in the Yukon—again, similar kinds of whitefish, with some salmon, the chinook and chum varieties. But the bigger fisheries in the Yukon would be the recreational fisheries, which make up about 85% of the freshwater fish harvest. They have the highest residential participation in Canada, at 20%, and bring in about \$23 million per year to the local economy.

On slide 13, looking at subsistence fisheries, we can't underestimate the importance and value of these fisheries to the local communities. They provide a way of continuing the traditional lifestyles, supporting their culture, supplying considerable protein, and contributing to local self-sufficiency. The byproducts for marine mammal harvesting are also of economic importance. When I talk about that, I'm talking about things like walrus tusk and narwhal tusk, which are used for arts and crafts and have a considerable value in both the domestic and international markets.

Looking at science in support of all this, there are a number of elements that we've identified on slides 14 and 15. The department is also engaged in several other types of scientific activities that are linked to this. One interesting study that's under way is the study of the marine ecosystems in the offshore areas of the Canadian Beaufort Sea. This ongoing study is providing many insights into the marine species that live in these waters as well as other elements of the ecosystem, such as the benthic communities, the oceanography, and water column structure. This will provide an important baseline in the pre-development phase in the Beaufort Sea, and it is adding greatly to our knowledge and understanding of how the Arctic may or may not support commercial fisheries in the future in the high western Arctic.

Climate change is also expected to affect northern areas more than other areas. The department has a number of studies that are under way to better understand the possible effects and to consider adaptation to them. The extent of sea ice loss in the Arctic is monitored by many agencies around the world, and Canadian scientists are playing a key role in that. Other studies are monitoring the change in species distribution, phytoplankton growth, invasive species, and the development of ecosystem models to guide adaptation change.

Not mentioned on the slides, but critically important to our work in the north, is the work that's being carried out by our Canadian Hydrographic Service. Clearly, enhanced Arctic charting is a priority. As we see increased shipping and transportation patterns in the Arctic, we're looking at new technologies to allow us to advance our work in that area.

Wrapping up, I'd like to talk quickly about some emerging fisheries. There's a Cumberland Sound 500-tonne quota. This past winter has provided some of the best fishing in recent years. There's a wish, as I mentioned earlier, for others to explore using a summer fishery with gillnets and longlines. This is something that has pros and cons. There are some folks who are a little concerned—or a lot concerned, I guess, is probably a better way of saying it—about possible entrapment and entanglement of marine mammals such as whales. We have to balance and find the best way with our co-management partners to exploit that fishery, if we advance on it, in a sustainable way without impacting marine mammals.

There's also been some work, mostly exploratory, on shellfish populations. Some localized clam, mussel, and scallop populations have been identified, but both the supply and the economics of a venture in that requires further work with our co-management partners. Crab exploratory work in the Hudson Strait, off Nunavut, has failed to find significant quantities of any type of crab that would be available for the commercial market.

● (1120)

There's also been some work on an exploratory kelp fishery in the western Hudson Bay, but that has not developed as yet into a commercial venture.

There are, however, undiscovered inshore turbot and shrimp opportunities, and we're hoping the stock assessment work that's under way will help reveal and exploit those opportunities for northerners.

The second last slide I have is related to opportunities. We talk in our region and in the department about the emerging fisheries in the north. We need more science, we need to continue our work in that area, and we need to work with our co-management partners and the Government of Nunavut specifically to ensure that the economic possibilities of these fisheries are exploited for the use of the local communities.

I'll end with some of the challenges. From the science side, we're talking about an area where the resources are unknown, where the population estimates are dated, and where stock assessment work is difficult and very costly to undertake. That's why we do a lot of this work in cooperation with other partners in other jurisdictions.

Resources are always a challenge in the north. We have financial as well as human resource challenges of doing business in the Arctic. Last but not least, there is the issue of infrastructure. The oceans are the highway of the Arctic, and the infrastructure to support that is critical to exploiting the fisheries for the benefit of northerners.

Mr. Chair, I think that will be a good place for us to stop. I hope I've not taken up too much time. We'll have some interaction on what is really of interest to the committee.

The Chair: Thank you very much, Mr. Burden. I appreciate your presentation.

We're going to start off with Mr. Kamp this morning.

● (1125)

Mr. Randy Kamp (Pitt Meadows—Maple Ridge—Mission, CPC): Thank you, Mr. Chair, and my thanks to you gentlemen for appearing before us as we begin this northern and Arctic study.

It's probably just me, but that was a lot of material, and I know I haven't digested it all. We may need to go back and look at the transcript to understand completely all you've provided for us. We are grateful for the overview.

Can you tell me a little more about the co-management models that are used throughout the north? How do they compare with what's used in the south, and what is DFO's role and presence in the north?

Mr. David Burden: I've not had the pleasure of dealing with the southern management of fisheries. All my experience has been in the central and Arctic regions. We have a cooperative and integrated approach. I sit on a committee—a formal governance body—that we have established under the land claim with the Government of Nunavut, the Nunavut Wildlife Management Board. It is our co-management partner, as well as NTI, which is the commercial and representative organization of the beneficiaries.

We have established our priorities for addressing the fisheries, and we work on those with an integrated approach. During the last few years, our focus has been on establishing an integrated fisheries management plan for narwhal. We are focusing our work on establishing basic need levels across all of the fisheries, and we are looking at the future as those works are starting to come to a conclusion. We're going to be working on establishing Nunavut fisheries regs. This work, done with our co-management partners, will allow for a made-in-Nunavut set of regulations, as opposed to the present regulations, which were established for the Northwest Territories.

So everything is done in a cooperative fashion. We have formal meetings twice a year. We have informal meetings. I have a director of northern operations who is in the Arctic and works with our co-management partners on a daily basis on all of the issues.

Mr. Randy Kamp: You've talked mostly about commercial fisheries, although you did refer to subsistence fisheries and I think you made a mention or two of recreational fisheries. Can you give me a bit more clarification of what you mean by a subsistence fishery and how it relates to a recreational fishery? Are they two completely different things, or are they different challenges and different opportunities as well?

Mr. David Burden: I would say they are two separate things: a traditional fishery versus a recreational fishery. A recreational fishery, to me, is a fishery where folks like us would go up and pay money for a licence, as clearly some of the best fishing in the world is in the north.

You can't really look at the traditional fisheries in the Arctic from a monetary dollar value and gauge their importance. They would pale in comparison to many of the fisheries in the south. But if you look at the food value or the value that it brings into those communities, you would have to multiply it tenfold or a hundredfold. The difference in being able to harvest seals is clearly an issue of importance to this committee and to Canada, and it is fundamentally important to many of these communities. The ability to be able to harvest those marine mammals and to be able to put traditional or comfort foods on the table is the difference between being able to have a family that is self-sufficient or a family that is in dire straits.

The sense of community involvement is unlike what I'm used to in eastern Canada, where you'll have fishing parties go out. These are traditional fisheries done at the community level. They work as a local unit. Obviously, the proceeds of that are shared across the community or across communities. The success of the community is shared even with the elders and those who are old or infirm and are not necessarily able to prosecute that themselves, and they benefit because they look after everybody. So it's very important to look at the traditional fisheries and what it means to the community and what it means to the Inuit from a cultural perspective.

Obviously, the recreational fisheries provide much needed economic input to the communities, but it would be of a secondary nature. If we were into issues of conservation concerns or anything like that, we would first look after the traditional fisheries, and then we'd look at the commercial recreational fisheries as a secondary item.

• (1130)

Mr. Randy Kamp: Good. That's helpful.

It's my understanding that for a few years now the U.S. have been pushing for a moratorium on fisheries in the Arctic. I'm wondering what the department's view of that is and whether it might be in Canada's future as well.

Mr. David Burden: I was asked that same question a couple of weeks ago at the foreign affairs committee.

We don't currently have commercial fisheries in the western Arctic, so the American position on a moratorium is to my mind a little bit moot. We do have a process. The minister has articulated the position, and we will work with our co-management partners and do the appropriate research. As Dave could say, we're a long way away from the Canadian waters, of being in a position to be able to have the data we need to look at some kind of a commercial fishery in the high western Arctic.

I think the surveys we've done to this point have shown that there's a number of fish there, but they're of a smaller size and they're spread out, and they wouldn't really be marketable from a commercial perspective, at least based on the studies we have to date.

Dave, do you have anything to add to that?

Mr. David Gillis (Director General, Ecosystems and Oceans Science Sector, Department of Fisheries and Oceans): No. I think that's a good summary.

We do have studies under way in the western Arctic area, and they are beginning to reveal to us what those population species' assemblages and abundances are. We have certainly not, as of yet, found what you'd see as a ready commercial resource.

As David said, we do have policies that guide us around these questions in Canada on the emerging fisheries policy, and it does require us to have a certain level of information about a resource so that we can make some informed decisions before we proceed. I don't see anything on the immediate horizon.

The Chair: Thank you, Mr. Kamp.

Mr. Chisholm, it's your turn.

Mr. Robert Chisholm (Dartmouth—Cole Harbour, NDP): Thank you very much for being here, gentlemen.

Mr. Burden, that was a very interesting presentation. We will need to go back through the transcript, and there were some points I'd like to dig down deeper on.

One of the issues is around these management committees you referred to. Where do they exist? Could you supply us with overall...? They all have plans for different fisheries, but they all have an overall plan. Are there too many to provide us with copies of those plans, or could you provide us with examples of them? How many exist, and where are they?

It would be interesting to get a look at their management plans.

Mr. David Burden: I'm at a loss to be able to give you an exact number. Obviously we have management plans for all the fisheries, and many of them have evolved over time.

I'm struggling because sheer numbers would be the issue. Every time we prosecute a fishery, a management plan has to be created, and that would be the basis of that fishery. So there would be one for every fishery we have, whether it be harvesting marine mammals or whether it be for char, Greenland halibut, or shrimp.

Mr. Robert Chisholm: Are there committees in each territory? Are they in each region of each territory?

● (1135)

Mr. David Burden: Okay. I was confused by where you were coming from.

Mr. Robert Chisholm: I do that sometimes with my questions.

Mr. David Burden: Perhaps it's my jet lag.

I think each of the fisheries is assessed with our co-management bodies, and we work on a co-management plan. So the plan, depending on the fishery—if it's in the western Arctic, in the areas that would come under the Fisheries Joint Management Committee, we would work with them; they would use our science, and we would use their traditional knowledge. We would work with the local hunter-trapper organizations. We would develop a sustainable plan. It would be discussed with the various communities, and we'd get their input. We'd determine what the harvest level would be, and then that would be prosecuted and we'd go forward.

We do the same thing in Cumberland Sound with the inshore fisheries.

When we get to the NAFO kind of fishery, there's a different process. Blair is probably more comfortable with that than I am and could speak to the vagaries of how those arrangements are put in place. As I said in my remarks, theirs are shared with multiple regions, so it's more than just the region I have accountability for.

Blair.

Mr. Blair Hodgson (Acting Director General, Resource Management, Ecosystems and Fisheries Management Sector, Department of Fisheries and Oceans): To perhaps clarify something a little, there's a bit of a difference between a board and the committee. Wildlife management boards, or entities of that type, are established by all the land claims agreements. Those boards provide advice to the minister, who ultimately makes decisions.

Nunavut is special because we've established a cooperation committee with them, but we have mechanisms that are similar with all the boards, for which there are land claims that have established such an organization. Something like northern shrimp or Greenland halibut does become more complex, because you might involve more than one land claim area—for example, Nunavut and Nunavik for shrimp.

We work with both of those partners in establishing a management plan for the area, and special allocations and commercial allocations are fairly finely subdivided. Nunavik and Nunavut do have overlapping claims, and we're waiting for a resolution between those two land claim bodies on the sharing of a resource between the two of them. The minister has determined the overall amount, and he's awaiting advice from the two boards—which will come separately—on the shares that should be allocated between them.

David also mentioned 0A and 0B turbot—you'll have to forgive me for using the numbers and letters, but it's how we manage things. That's Davis Strait and those are stocks that are shared between Canada and Greenland, both turbot and shrimp. For them, Canada and Greenland jointly ask for advice from the NAFO Scientific Council. Although it's not a high seas fishery, it's shared between the two countries. NAFO does provide the service to us as contracting parties. They provide us with scientific advice, and then we unilaterally and separately determine our catch limits.

Mr. Robert Chisholm: Thank you for that additional information. I asked the question because, as David said in his presentation, the way the fishery is managed and prosecuted in the north is different from how it is done in the south.

I think that's one of the important questions we're going to be exploring as a committee, so I would be looking for examples of where that difference lies, in the focus on the traditional fishery, subsistence fishery, and so on. That's where I'm going, and that's what I'll be looking for as we go forward.

On the question of the degree of engagement of DFO in these fisheries, once the management plan is developed and it's prosecuted, how involved is DFO? What kinds of resources does DFO have on the ground in these areas?

● (1140)

Mr. David Burden: We have the full complement of the resources required to prosecute, manage, and enforce fisheries. We have a C and P complement across the Arctic that looks after the enforcement side of the house and the management. As well, we have resource management folks on the ground in the western Arctic, stationed out of Yellowknife and Inuvik. We have staff in Iqaluit. We also have science folks in the Arctic—and that's a bit of a coup for us, to have science staff resident in the high Arctic on a regular basis.

One concern expressed to us by our co-management partners is that the government presence has been very nomadic. We come in, do the work, and then we take the stuff and go south. We've been fortunate to have some rock-solid scientist folks agreeing to work in the Arctic for sustained periods of time, which helps build a rapport and a sense of being in a community. It opens up a lot of doors and allows us to marry the core science information with the traditional knowledge.

We have the capacity. Obviously, we'd like to have more, as anybody would say, but we are managing the full set of the fisheries, and in doing that, we're working with the co-management partners. The territorial governments have conservation officers who work very much in partnership with ours.

In fact, just this past February, we had some integrated training for our enforcement teams. It went through use of force, how to gather evidence, the appropriate way to measure narwhal tusks, and all of these things. When we do those joint training operations, it makes us all stronger, and it makes a presence, so we can expand by force. It's the same thing with the way we do our scientific research.

We have numerous examples where Canada partners with the United States or with other international partners to procure ship time and share the resources. Scientists are looking for a platform, and we can do a multitude of research activities, particularly during the daylight part of the year, and run 24-hour operations. The more scientists we can get on, the more we can reduce the costs and expand the scope of the work we're able to do.

There's a lot of leveraging of opportunities. The unique aspect of the fisheries in the Arctic has allowed us to leverage those opportunities that industry, co-management partners, and governments are investing into the research and the science around the fisheries. That's helping us expand our capacity manifold.

The Chair: Thank you, Mr. Chisholm.

Before we continue, colleagues, I want to welcome to our committee today Senator Charlie Watt, the senator from Nunavut and northern Quebec region.

I want to thank you, Senator, and welcome you this morning to our committee meeting. The senator has a particular interest in the subject matter we're studying here today

Next we're going to Mr. Allen.

Mr. Mike Allen (Tobique—Mactaquac, CPC): Thank you very much, Mr. Chair.

And thank you, gentlemen, for being here today.

You talked a little bit about one of the seasons. I'd like to just get a sense of the different seasons for the species across the north. You said one of them was wrapping up. Can you briefly and quickly lay out the different seasons, for example, for halibut, shrimp, and char, so the committee can get a sense as to the timing?

Mr. David Burden: I'll break that down into the winter fisheries and the summer fisheries.

In Cumberland Sound there is a Greenland halibut or inshore turbot fishery that's just wrapping up. That's the one I was mentioning. There's probably about another month or so of that. That's on the ice using longline kind of grounded technology. There's going to be a lot of the fisheries in the western Arctic for the whitefish as soon as the ice starts coming out of Great Slave Lake. Probably in the early part of June those fisheries will start off and we'll start seeing the plant open up in Hay River.

The fisheries in the east, through the strait, would start probably in late May and continue on. We're seeing fishers staying there until almost December. So there's probably about three, maybe four, months of the year that there's not commercial activity up in there.

Does that pretty much cover it?

• (1145)

Mr. Blair Hodgson: Yes, I think so.

Mr. Mike Allen: On the recreational side, would the time period be generally May till the fall?

Mr. David Burden: It would cover the tourist season, so I think it would be closer to June, July, August, September timeframes. Clearly, it's going to be when your char are running, and that's going to be the big issue. But you can fly into a lot of these lakes. From a

recreational perspective, I had the pleasure many years ago of flying into a couple of lakes in the Yukon. You can go in there any time and you can pull out some pretty monsters.

Mr. Mike Allen: I want to refer you to slide 10.

One of the comments you make here is that there are high fuel costs, high shipping costs, high Canadian dollar, and "...other employment opportunities have lead to an overall decrease in the commercial fisheries".

I have two questions on that one. One, is an overall decrease in the commercial fisheries necessarily a bad thing if the resource is not being exploited? What is the economic impact on the communities from that? I guess that would be the first thing I would ask. And, two, where are those other employment opportunities arising?

Mr. David Burden: That's a very good question, and I probably skimmed over it too quickly.

It's really the age demographics. I'll give you an example. I was in the western Arctic, I guess it was last fall, and I was talking with some fishermen. Right now I think we have approximately about a dozen commercial fishers on Great Slave Lake. They're all probably a bit older than I am—maybe quite a bit older than I am. It's a pretty tough life. Their kids are at that age when they've got the opportunity of continuing in the tradition of the fishery or working in the mines or a resource industry. The reality is that there's just not the uptake. There are other opportunities, through resource development projects or the support for them, where clearly one can make an awful lot more money in an awful lot shorter period of time. As a result of that, we're not getting the uptake.

Now it's a little bit different in the eastern Arctic. I'm not sure why it is, but there are more of the youth who seem to be going down the road of exploring fisheries as an opportunity. We're seeing the same level of resource development projects, so I don't know if it's the community or the geography or what it is.

But we're really struggling, as I said, with only a dozen or so fishers on Great Slave Lake. That's not really going to be a viable fishery, unless some new blood and new growth comes into it, whereas in the eastern Arctic we're seeing a lot of youth showing an interest, so it's much more vibrant.

Mr. Mike Allen: Basically what you're saying, then, is the major players are some of these traditional fishers. Those are the major players with the licences in the region?

Mr. David Burden: In the western Arctic, yes, it's been the same people for a long period of time. In the eastern Arctic, obviously, we're looking at enterprise. Communities are using their licences, through their hunter-trapper organizations, and building it out for the community. So you've got probably a few people focusing on it, but it's benefiting the larger community, and you're getting a good cross-section of youth, as well as people who have been in the business for a period of time. The difference is that it is an emerging fishery.

Mr. Mike Allen: I'm picking up on one of the comments you talked about on the opening of the facilities. Is processing capacity and access an issue in the region? Where are the processing facilities for the fishery?

Mr. David Burden: There's Pangnirtung in the east, we've got Cambridge in the middle, and there's another plant in Hay River. Those would be the bigger ones. There is also a smaller capacity in other places like Rankin and a few others.

The biggest challenge is that there's a lot of fish in other areas, but it's the high transportation cost of getting it to the plant. Once you've got it into the plant, you've got to get it out. If you're talking about fresh fish.... There's not a lot of that that's easily brought out because of the high transportation costs and issues around air freight support. However, the plants that are making very good small markets and focusing on the truly north, truly wild brand, on char and that kind of stuff...a lot of the offshore catch is processed on the water and doesn't come in. It's either done on the high seas or it's actually done in Greenland. We don't benefit from that. It would be a question of having the capacity, and having the capacity in a place where you can get to in order to make it viable.

If you wanted to look at what the single obstacle is in terms of viability, it would be where it is versus where the market is. When you're shipping everything south or east to Europe or Asia, it's a high cost.

• (1150)

The Chair: Mr. MacAulay.

Hon. Lawrence MacAulay (Cardigan, Lib.): Thank you, Mr. Chair, and I want to welcome our witnesses and the good senator.

As you're fully aware, the major decline in the ice in the central Arctic...about 40% of the central Arctic Ocean is open to commercial fishery. Of course, that is in international waters.

Is there any potential for an agreement with other countries for the co-management of this? Is there a possibility an agreement can take place, and what would Canada's role be? Do we want to establish a regional fisheries organization for the central Arctic region? Should the Arctic Council have a role to play, considering that we have the chair of the Arctic Council?

Mr. David Burden: There are many questions there. You do that to me every time.

Hon. Lawrence MacAulay: I have a short period of time and they cut me off, so I have to ask a lot of stuff.

Mr. David Burden: Clearly, the theme for the Arctic Council is development for northerners. I think that is one of the platforms we could hitch to.

Your broader question is on what we do in the international waters and how we manage that. It's probably the main reason the Americans are focused on this. I don't think they're worried about what we and they are going to do. I think the worry is, what if, at mile one outside the boundary, somebody decides to come in and start prosecuting a fishery? What do you do? That opens up all kinds of questions. I think what you're really looking at is having to develop some kind of coalition of the willing. Even if you had a coalition of the willing, I think you'd have to look at what you do to enforce it.

We have our enforcement capabilities. We use the coast guard; we use Transport Canada; we use the Department of National Defence to expand the scope of our surveillance patrols and that kind of stuff.

It would be a stretch for us and for the Americans to expand it beyond that. Even if you did, how would you prosecute it? There would probably have to be something more than the Arctic Council that would be able to put in the governance that would be necessary to put that forward.

It's a really good question. It's one that's garnering a lot of talk.

Hon. Lawrence MacAulay: Like China.

Mr. David Burden: I think when there's a resource that's available and you have a demand for it, people will come to look for it.

As you say, there is reduced ice coverage. I think it's important to remember that what we read in the media about reduced ice coverage does not mean no ice. There's still a lot of ice. It would not necessarily lend itself to prosecuting a fishery with traditional capture technology. You have to take all that into consideration.

I think the key is, as I've said in my remarks, ensuring you have the science to support it. We're charting new territory here. There's a lot we don't know about it: how fast stocks recover, how long it takes, and where they're coming from. Those kinds of issues would all have to be factored into that.

As I've said, with the information and preliminary data we have so far, particularly in the high western Arctic, it doesn't look viable.

• (1155)

Hon. Lawrence MacAulay: The fishery itself does not look viable.

Mr. David Burden: We're looking at very small fish. We're seeing high numbers of them, but we're not seeing the size of fish that would make it commercially viable. If you had a big fish versus a small fish, which are you going to prosecute? That's what the research has shown us so far.

Dave, I don't know, is there any...?

Mr. David Gillis: I can maybe elaborate a little bit on just a couple of points. We are talking in these percentages about the extent of open water in the summer period. It's obviously still fully iced in the winter. This has been increasing over time, and the estimates vary on when we'll get to a summer where there's no ice at all. It could be 2030—you might hear that in the near term. Other folks are saying 2050. It bounces around.

Dave's points are very well taken. The thing about this central Arctic Ocean area is that it is an Arctic ocean. It's a very cold ocean, and the productivity regime in there is still driven by cold factors. Fish are small, as Dave says, and the productivity regime is simply not there to produce the kinds of fish in the sizes you would want and in the abundance you would want to support commercial operations as we understand them.

That could change. I don't think it's imminent in any way, but I think that is one of the things that we need to begin to monitor over time. The kinds of studies we're starting to do in the western Arctic are giving us a good baseline and some good insight into how those ecosystems work so that we'll see those changes coming.

The other point I'd make, just in closing, is that, again, when we look at that whole key area in the middle that doesn't belong to anyone, that's extraordinarily deep water. There's very little shelf in there to work with, and it's usually on the shelves, when you have a more productive ocean, that you get your large biomass. That will be a factor in the future as well.

Hon. Lawrence MacAulay: Thank you very much.

Basically, we haven't dealt with any other country other than the U.S. to this point.

Mr. Blair Hodgson: There have been some discussions amongst the five coastal states of the Arctic. As Dave and Dave mentioned, we are talking about the high seas in the central area, so outside the specific economic zones of all the coastal countries.

There have been some discussions. There has been some joint scientific work as well, and we are looking far into the future to when this would be ice free. The discussions are preliminary at this point. There is some studying. I would like to note, however, that it is not a legal vacuum either. The international Convention on the Law of the Sea applies in this area, and so would the UN convention on straddling and highly migratory fish stocks. It's not a complete loophole area, even though it is still covered by ice.

Certainly the U.S. has past experience with fisheries opening internationally before the institutions have caught up with them, which is probably what prompted them to take a leadership role in encouraging other countries to start focusing now on what could be the fishery in the future.

The Chair: Thank you very much, Mr. MacAulay.

We'll now move to the five-minute round. We'll start off with Mr. Donnelly.

Mr. Fin Donnelly (New Westminster—Coquitlam, NDP): Thank you, Mr. Chair.

Thank you to our DFO panellists.

I just want to start off with climate change and the impacts. Scientists are telling us that the Arctic and northern areas are warming at twice the rate of anywhere else on the planet, and there was a reference made that by 2030 or 2050 it could be ice free. Obviously this is an issue.

How much of an issue or an impact is it on the fishery, and what are the concerns or the perspectives of the local fishing industry? What are their concerns and perspectives? What is our available science on that? Do we need more? Do we have adequate...? What is the role there?

Mr. David Burden: I'll start and then pass it off to Dave or Blair.

Clearly we're seeing some species that we wouldn't traditionally see in waters. We're seeing orcas, killer whales, moving into waters that we haven't seen them in for probably decades. That is obviously having some impact on other marine mammals and fisheries.

The Inuit don't really like orcas. They look at them as being a bit invasive. I guess that would be one way of looking at it. They don't like the meat, and they have impacts on narwhals and beluga and so on, so there are challenges with that.

Obviously there have been migrations of different species of fish.

Dave, maybe you'd like to speak to a little bit of that.

Our fishery surveys are giving us insights into some of this, but we're assuming that as we see different currents and different temperatures we'll see different migrations and increases or decreases in the resource.

● (1200)

Mr. David Gillis: Thanks, Dave.

The department does have a program that is bringing some resources now to these kinds of questions. They are very important questions, and we do expect that over this time period—that's a little hard to define right now—there will be changes that we need to understand and there will be adaptations that we will need to make ourselves and assist other Canadians to make as well in their areas.

But we're one of eight departments that have been funded to do some work in this area. In our department, it's called the aquatic climate change adaptation services program, ACCASP. It's in the middle of a five-year run right now.

There are three principal activities—they all include the Arctic—that we have done and are doing under this program. We've done a very detailed risk assessment of what changes we might expect in all of the areas, all of the aquatic areas in Canada, including or defining the Arctic as one, to help us identify what are the threats and what are the opportunities, even, because it's not necessarily all negative. We simply want to know what these changes are going to be. Based on that, we can then use that as a platform to identify where we may need to adapt DFO programs and decision-making systems in order to account for a change in climate in the future.

So we've been doing these risk analyses. They're just finishing up. They will be available publicly before very long. It's a very large document, so it takes a bit of time to get it into good shape.

We also, as part of this program, have some funding that we can use and are using for two types of scientific studies. Well, one is really scientific, the other is more general.

We have funds to help us better understand specific climate changes that might be the types of changes related to an area where we would want to adapt in the future, to develop a tool to maybe make decisions differently in the future than we do now.

We have a second fund that is actually working on adaptation tools now, areas where we have sufficient science information to maybe design a decision-making system to account for a climate change effect and bring those changes into effect in the near term.

So we have quite a few projects around the country. A number of them are specific to the Arctic, on such subject matters as changing fisheries, distributions, understanding how primary productivity in the ocean is going to change or likely to change as a result of climate change. These are things like phytoplankton and zooplankton, because they're at the base of the food chain that supports the fisheries, which we would then have an interest in.

Invasive species is another big one as well, of course. When climatic conditions change, then this creates opportunities for species that are not endemic to an area to move in, and sometimes there are harmful consequences of this.

So to get to your question, some things that we are currently doing will help the department and therefore help Canadians adapt to a change in climate across the country, but there are specific things that we are doing in the Arctic.

Mr. Fin Donnelly: Do I have any time left?

The Chair: No.

Mr. Fin Donnelly: I'm out? Then I can't ask my U.S. relations in the Yukon question. I'll have to skip it.

The Chair: Maybe we'll get to that in another round.

Mr. Sopuck.

Mr. Robert Sopuck (Dauphin—Swan River—Marquette, CPC): Thank you.

I'll start with just a quick observation.

I was very surprised at the short shrift you paid to the recreational fishery in your presentation. At a previous meeting, one of the DFO officials pointed out that the recreational fishery in Canada is worth \$8 billion a year versus \$2 billion for the commercial fishery.

I think that reflects the culture of DFO, and I would suggest it's time that what DFO does reflects the reality on the ground.

I was interested in the comment about commercial fishing, that the difficulty is transportation to markets. Having worked in the eastern Arctic myself, I can certainly agree with that. But again, from a recreational fishery standpoint, the money and the markets come to the fish as opposed to the fish going to the markets.

I will be working hard over the next little while to ensure that the department begins to emphasize recreational fishing to a much, much greater extent.

To your point about the Yukon in terms of participation in the recreational fishery, that's an important part of the culture and life of Yukon. Again, as I said, to barely mention it in your presentation—I find it quite disconcerting.

I would like to focus on Arctic char in particular. Having done a bit of work up there on char, I can certainly agree with you in terms of the importance of the fish to the local communities and the culture and so on.

What is the state of the Arctic char stocks? Obviously it varies all over the map, but are any stocks really in trouble? How quickly will they come back if managed well? Or are most of the stocks in reasonably good shape?

• (1205)

Mr. David Burden: I guess I'll start with that one. I'd say that for the most part, the stocks are in pretty good shape. We have some areas where you run up against the traditional harvest and recreational fisheries. We have some fisheries where we have concerns, and we've had catch and release. As a result of the catch and release program, the same fish is being caught multiple times. Obviously that doesn't help the fish. When we see those kinds of

things, we'll take appropriate measures to put a complete ban on the recreational fisheries to ensure that we bring it back.

Just going back to your point about giving short shrift to the recreational fisheries, I apologize for that. It was not overlooking it. It was, to an extent, to try to cover a lot of information. I can assure you that we are working very diligently with our colleagues, particularly in the Northwest Territories, who have approached us over the last several months related to how we can deal with their fisheries regulations and the work they want to do to ensure the recreational fisheries and the regulations around those that allow them to enhance and exploit that to a much bigger potential than we are currently. So there are discussions. I've had several meetings with them, and we are working with them to bring forward regulatory changes, which will allow them to market that from not only the fisheries perspective but the tourism potential of it, which is huge, as you've said.

Mr. Robert Sopuck: Yes, of course. I don't want to belabour the point, but again, the great fishing lodges on the Great Bear and Great Slave lakes, those are legendary. Again, we need a higher emphasis on recreating that.

On your comment on releasing fish, unless you have hooking mortalities in studies, you don't really know what the mortality rate is. Catch and release is a good thing, and in terms of stock sustainability, the management of the recreational fishing resource is probably the most sustainable of all.

Just switching gears to marine mammal stocks, what shape are marine mammal stocks in? Specifically, I'm looking at the ringed seal, the narwhal, and the beluga.

Mr. David Gillis: I'll take a crack at that. It's hard to generalize, for the most part. Maybe the easiest one to answer is the bowhead, because it's such a broadly distributed animal. These are very large whales, and they range over a very large part of the Arctic. Generally, that stock now is considered to be in fairly good shape. Our recent estimates were considerably better overall than what had previously been thought. It's probably a combination of change in the stock and change in our ability to pull together a good picture over a wide area. Nevertheless, it's reasonably good news, and it's conservatively harvested, so I think that's fairly good.

With regard to narwhal, it's a species where there is some concern, but we've done a lot of work within the department and with our co-management partners over the last couple of years to put together a more robust management program and a science program to support it. The driving factor here is CITES, the Convention on International Trade in Endangered Species. This species is listed on appendix 2, which means that we need to be able to look at the harvest and certify in a sense that they are sustainable before products could be exported. It doesn't affect domestic use, but foreign export. As David mentioned earlier, there is an export market for narwhal tusks. We've been doing a lot of work with our co-management partners in the Arctic to get those fisheries into shape and be able to show that they are being sustainably harvested at current levels.

Beluga really varies. There are a number of stocks of beluga, and they vary from being not in bad shape to being in quite bad shape, depending on where you are. All of these are being monitored. There are different management plans, as David explained earlier, in those different areas with the appropriate level of control.

Ringed seal is a bit of a challenge. It's endemic everywhere. We don't, quite frankly, have a good monitoring program for ringed seal. We don't have the sense that there's a big issue with ringed seal, but we would be hard pressed, to be honest, to bring forward a good quantitative analysis on that right now.

• (1210)

The Chair: Thank you very much.

Ms. Duncan.

Ms. Linda Duncan (Edmonton—Strathcona, NDP): It's a great discussion. I'm delighted to hear the committee is reviewing this. I'm only added in today, replacing one of my colleagues, but it's near and dear to my heart. At one point in time I was the ADM for natural resources for the Yukon, and I had the privilege of representing the Yukon on the Arctic environmental protection strategy.

Regrettably, in the late 1990s, the then Liberal government disbanded the Arctic environmental protection strategy, which was a very important forum for scientists of all jurisdictions across the Arctic to talk about these kinds of issues. Is there any kind of mechanism like that now in the federal government, where the first nations governments and the territorial governments and the federal government, and potentially international players, are coming together?

Mr. David Gillis: I can provide a partial answer to that. We talked a few minutes ago about the Arctic Council. I'll talk internationally first, and then I'll talk domestically in a minute.

There are some structures that are actually quite effective at bringing not only government representatives but non-governmental organizations and interest groups into discussion about science issues generally across the Arctic and international arena. So that's one area where there is....

I'm not familiar personally with the program you made reference to.

Ms. Linda Duncan: I'm specifically interested in domestic....

Mr. David Gillis: Domestically, there is probably not a single structure of the type to which you allude. Again, I'm not familiar with how that previous one worked.

Through the co-management agreement structure that we were discussing earlier, there are some good, strong science tables there that bring together folk who work for those organizations and represent those nations with a range of federal government scientists.

If I could elaborate a little bit on the comments that David made earlier, about how it works on the management side, I can say there is a very strong sense of collaboration, and a need for collaboration, on the science side within the co-management structures we have. We're always trying to stay in touch with what our clients' issues and needs are, and I would say that's true across the country. The land claims that often are the reason why we have these structures really bring that to a new level when we're talking about a lot of Arctic

issues. We talk regularly to them about what it is they would like to do, what we plan to do, and how to do it. Often they are financially partnered with us. I would say that is one of the more important venues we have in which to interact.

Ms. Linda Duncan: It sounds to me like there isn't an overall forum.

On the recreational fishery and the legendary fish camps, I happened to work at one of those in 1969. In one of the many American-owned fish camps, where a lot of American fishers flew in and out at that time, there were a lot of bays that were already fished out. My question to you is, now that we have first nations final agreements.... When I worked in Yukon, there was always a negotiation if you were going to be renting rafts, doing trips, fish camps, and so forth. There had to be arrangements so that the first nations groups or the Inuit or the Innu or Inuvialuit could participate.

Could you tell me the status of the freshwater fishery in the north, across the northern territories and the Arctic? Is it still mainly American ownership, or do we have a lot of Canadian ownership? Do we have first nations, Innu, and Inuvialuit ownership?

• (1215)

Mr. David Burden: I think probably the best thing for me to declare at this point is that although I'm the central and arctic region RDG, I only cover the northern slope of the Yukon. I don't cover the mainland part of it. My colleague from the Pacific region looks after it.

I can tell you there is, as I said in my remarks, a very healthy outfitter and charter industry focused on the freshwater stocks.

Ms. Linda Duncan: Are they Canadian?

Mr. David Burden: I don't know the economic—

Ms. Linda Duncan: Could you get back to the committee with the breakdown?

Mr. David Burden: We could research that, no problem.

Ms. Linda Duncan: And how many might be first nation or Inuit or Inuvialuit co-owners or total owners.

Mr. David Burden: Yes.

Ms. Linda Duncan: One question I have is about the long-range transport of contaminants. That was a big issue when I worked in Yukon. I know it's a big issue for the traditional harvest of the species. Are you working with other agencies or entities, looking at the potential impact of long-range transported contaminants on the marine fishery and marine wildlife?

Mr. David Gillis: Probably the program that would provide the most perspective on that would be the northern contaminants program, and that's not run centrally out of our department.

The division of responsibilities with regard to contaminants, understanding processes that would bring contaminants from another area and a mechanism by which they might get into an ecosystem—it wouldn't be us. It would more likely be Environment Canada or AANDC.

Ms. Linda Duncan: Right, but I'm interested. Most of the discussion has been about a potential commercial fishery, and of course the level of contamination is going to have a major impact on the saleability. I'm just wondering if there's any kind of interaction between your department and the contaminants group about whether that's potentially a growing issue. Is it stabilized?

Mr. David Gillis: I'm not aware actually of what the trend would be in that. If we're thinking about human use of those fisheries products and the level of contaminants and what issues there would be there, it would be the responsibility of Health Canada and CFIA to run those programs.

The Chair: Thank you very much, Ms. Duncan.

Ms. Davidson.

Mrs. Patricia Davidson (Sarnia—Lambton, CPC): Thanks very much, Mr. Chair.

Thanks, gentlemen, for being with us again today.

Before I ask my first question, I would like some clarification. When I turn to slide 3...do you refer to western Arctic as everything west of the Nunavut settlement area?

Mr. David Burden: I actually use Cambridge Bay as my middle ground for the Arctic. So everything west of Cambridge Bay is the western Arctic to me, and everything east is sort of the.... I haven't really, even in my mind, gotten it figured out as to what the eastern heart is, but Cambridge Bay is for our purposes east or west.

Mrs. Patricia Davidson: Okay, thanks. That helps clarify a little bit.

Where are your DFO offices located?

Mr. David Burden: We have offices in Inuvik and Yellowknife, in the western Arctic, and we have an office in Iqaluit, in the eastern Arctic. The director of northern operations, whom I mentioned earlier in my remarks, currently resides in Inuvik. He will be moving when the transportation routes are opened. He'll be coming across, and probably by late June he will be situated in Iqaluit.

Mrs. Patricia Davidson: You talked a little bit in your opening remarks about the small craft harbour in Pangnirtung, and I think you said it was hopeful it would be opened in June of this year, or the summer of this year.

Mr. David Burden: I hope I didn't say "hopeful".

Voices: Oh, oh!

Mrs. Patricia Davidson: Okay. It will be.

Mr. David Burden: It will be, yes, or you'll have a new RDG the next time the committee asks. I'm safe in saying that, in that we substantially completed the work before the freeze-up last October. I was in Pangnirtung just as we were wrapping up operations. The wharf is actually complete. We haven't got the bollards on. We've got some electrical work to do and we've got a little bit of work to do with the marshalling area off to the side. But we've had vessels using the facility over the latter part of last season.

We expect the last bit of equipment that's required to complete the electrical work to come up on the first sealift, so that will be loaded in May-June. That work will be done over July, and we expect the commissioning to happen in the latter part of July, early August.

• (1220)

Mrs. Patricia Davidson: What kinds of activities will it support once it's up and running?

Mr. David Burden: It will support the Cumberland Sound inshore fisheries.

Mrs. Patricia Davidson: Okay.

When we talk about the fisheries in general across the northern Arctic region, which ones are expanding and which ones are shrinking?

Mr. David Burden: I'm not really certain that I would say anything is shrinking. As I said in my remarks, the fisheries are an emerging fisheries. Fifteen, twenty years ago, there really weren't a lot of fisheries in the eastern Arctic.

So there's a lot of pressure being exerted to expand fisheries for Greenland halibut and for shrimp. Those would be the main species. I think you could see more char being prosecuted, but again, it's access. There are a lot of areas where it is, but you've got to be able to get it to a plant while it's still viable or marketable.

In the western Arctic, if I had to point to an area where I have concerns, it's related to the commercial fisheries on Great Slave Lake. Maybe the focus there needs to be moving more to the recreational fisheries, which I think if you looked at the dollar amount and the economic return, it would have a much higher potential value. And we've got that demographic challenge that I mentioned. So if there was an area.... It's not so much lack of fish; it's lack of resources to prosecute that fishery.

Mrs. Patricia Davidson: Which industry would have the greater weight, the harvest of the marine mammals or the fisheries?

Mr. David Burden: Primarily we'd be talking about in the eastern Arctic. It depends upon the community and I guess it depends upon how you're asking your question. If you are asking it from the community's perspective—

Mrs. Patricia Davidson: I am asking from both the community perspective and the economic perspective.

Mr. David Burden: As I said, you can't underestimate the value of the traditional fisheries, and I'd put marine mammals into that. It's huge, as a food cost to a community.

The commercial fisheries related to shrimp and Greenland halibut or turbot are prosecuted by a few people for the larger community, and through the arrangements in the land claim and with the community associations, they all benefit from it. But it's a few people prosecuting it for the benefit of the greater good. You can answer that question either way and come down with an answer.

I don't think there is a right or a wrong to it. It depends upon what your perspective is. If you're a young family trying to feed your kids and you look at what it costs to bring in milk and fruit and vegetables and that kind of stuff, you're going to be thinking that the traditional marine mammal harvest, as well as char and those kinds of fisheries, is fundamentally important to you. As dollars and cents in the economy of the north, it's going to be looked at from the commercial value of turbot and shrimp.

The Chair: Thank you, Ms. Davidson.

Go ahead, Mr. MacAulay.

Hon. Lawrence MacAulay: Thank you, Mr. Chair.

Do you expect Pangnirtung, when it's completed, would expand the inshore fishery substantially?

Also, you mentioned that Great Slave Lake would be better, sir, as a recreational fishery area. Is that because the infrastructure is not there, or is it the numbers of fish, or are the fish smaller? Just what is the situation?

• (1225)

Mr. David Burden: The reason for that small craft harbour is that there is a plant in Pangnirtung. It's providing good employment and it has had good returns. With the small craft harbour facility, there is the potential for exploiting the potential much further on the inshore and just having more of a summer fishery than we've seen to this point in time.

The important thing to remember with the Pangnirtung small craft harbour is that it's going to help the inshore fishery in Cumberland Sound. It's not going to do anything to bring in either shrimp or fish from the east because the transit would make it cost prohibitive.

Hon. Lawrence MacAulay: It's too far.

Mr. David Burden: Exactly.

If I were the Nunavut government, I think I'd be looking for something out on the coast, and I'm sure when you go, if you're talking to them, that will be one of the issues they'll be talking about.

On Great Slave Lake, the issue there is not fish. It's the high cost of transport to get fish to market and, as I said, the demographics. The young people can make more money working in the resource sector than they can fishing, so they're moving away from it, but those who are involved in the sport fishery or recreational support of it, as outfitters and so on, are doing very well. There are an awful lot of tourists who will come up and pay an awful lot of money to fish in world-class pristine lakes.

Hon. Lawrence MacAulay: That is just going to expand and expand.

Mr. David Burden: From the discussions I've had with my counterpart from the Northwest Territories government and with Inuvialuit and others in and around the western Arctic, that's an area they see as having potential to exploit, yes.

Hon. Lawrence MacAulay: Do you have a concern about the development in the Mackenzie River basin? Is there any difficulty with contaminating the waters downstream?

Mr. David Burden: I don't think it would be any different in the Mackenzie than it would be in the Yukon or anywhere else. When we're looking at any resource development, we are involved in the review from a fisheries and fisheries protection program standpoint, so we'd be looking at it as commercial, recreational, and aboriginal fisheries. We would work through the approval agency and provide technical support and advice to them, and we'd obviously be working with our co-management authorities to ensure that all of that is taken into consideration. We would want to see the proponent providing us with the scientific information to allow us to make informed decisions on what those impacts could be and what the

appropriate mitigation measures would have to be in order for it to proceed.

Hon. Lawrence MacAulay: I expect I know the answer, but on invasive species and the ballast water regulations, they're the same there as they are in the rest of the country. Is that correct?

Mr. David Burden: Yes. Ballast water is Transport Canada's domain, not DFO's. We provide the science to support it. That said, yesterday some of my staff were providing presentations on ballast water exchange in the Arctic at a conference related to invasives across the international scope, and there was a lot of interest in the Arctic.

If we do mid-ocean and we do the Canadian standards for ballast water exchange, we're thinking that we're in pretty good shape. I think what we have to look at, particularly in the east as we're coming in—and it would be the same thing in the Beaufort because of the shallow waters in the near shore—you'd want to make sure that you weren't bringing in something that could survive.

As an example, the Mary River project, when it's up and running, is going to be taking a lot of iron ore between the Mary River facilities and Rotterdam. Rotterdam is known for being one of the highest invasive breeding grounds in the world, I guess, because of the shipping traffic. What we'd be looking for is making sure there was some kind of mid-ocean exchange, and then, as it got closer to the destination, potential treatment or whatever under the regulations that Transport would put in place. The science we have sort of says yes, that should be sufficient.

• (1230)

Hon. Lawrence MacAulay: That should take care of it.

Mr. David Burden: Yes.

Hon. Lawrence MacAulay: On the—

The Chair: Thank you, Mr. MacAulay.

Mr. Chisholm.

Mr. Robert Chisholm: Thank you.

I'm interested in what our coast guard search and rescue capacity is in the north at the present time. Could you give me some indication of that and maybe some sense of how many missions there have been over the past few years? Also, what's the plan over the next 5 to 10 years in terms of that capacity?

Mr. David Burden: I think that would be a question we'd take back to the commissioner of the coast guard and my colleague Mario Pelletier, who is the assistant commissioner for our central and Arctic region. I've had a lot of time in the coast guard over my career, but I think it's inappropriate for us to speak for the commissioner on his program and mandate.

You know that we have some new vessels coming into the fleet, and obviously that will impact on our ability to have resources there. I think it's common knowledge that we have a fixed duration of season when we have our icebreakers in the Arctic, and fishers and others are prosecuting those resources for much longer periods of time. I'm sure the commissioner would provide a lot of good information on that to this committee.

The other aspect is that it's not just the coast guard; it's the Canadian Rangers. We have the territorial governments, as well as the assets of the Department of National Defence, that can all be brought to bear on these, but we are talking about some pretty remote areas, and it is an issue of concern for all of us. We're seeing more and more people who want to go to the Arctic. When they go there, how do we ensure that they're there...? I think the first part of it is that the mariners are always responsible for ensuring that they have the appropriate safeguards.

Mr. Robert Chisholm: Okay. I don't know whether we ask for that information to be delivered or whether we're going to call in the commissioner, but it is a question that I think is appropriate to DFO. I appreciate what you've said, though, and would be quite happy to receive that information, maybe in writing, from the commissioner.

The Chair: Mr. Chisholm, we're going to have a meeting beyond this to discuss steps forward, and I can suggest that we could bring it up at that point. We could discuss where we go from there.

Mr. Robert Chisholm: You said earlier in your presentation that resources are unknown to a large extent, that the stock assessment is incomplete. What steps are being taken by the department to make that information complete? What can we expect in terms of increasing effort in the north at a time when that information is incomplete?

Mr. David Burden: I'll start by saying that the reason it's incomplete is that it is an emerging fishery, and we're continuing to work. Particularly in the eastern Arctic, we share the resources with Greenland, so we do a biannual multi-species survey divided into two zones. Dave could probably give more information on that. We're partnering to ensure that we have the appropriate information going forward. As we see the potential impacts of climate change and movement of species and that kind of stuff, we're wanting to expand our research going forward.

It's a work in progress, and we partner with industry and our co-management partners to provide the resources we've put into it. We have had an agreement in place for the past five years that wraps up this year. We'll be spending this next year ramping up a new agreement concerning how we'll conduct our research going forward and how we'll allocate resources from the department and our partners to ensure that the work is done for the next five years.

Dave, do you have anything to add?

• (1235)

Mr. David Gillis: I'll perhaps add a bit more context. As somebody in the business, I would have to say that stock assessment information is always incomplete. We can always use more information; that's always true. That said, as Dave has outlined, for the moment we have our main emerging fisheries covered: the offshore shrimp fishery, the emerging inshore fisheries for Greenland halibut and shrimp again, and the char fisheries.

It's not just a matter of our resources. It's a matter of the resources we have, plus what the partners we've talked about several times have, and of holding a solid conversation with them so that we are collectively making the right decision to ensure that we have the most important bases covered. That's a very important element.

It includes academia. ArcticNet is an academic national centre of excellence that is very well developed and matured now. They are

playing an important role in having us learn more about the resources generally, which can be used for all kinds of purposes, including making fishery management decisions.

For the way forward I think I'd look back. What I mean is that the Pang project, which we talked about earlier, is a case in which we were clearly taking a decision with the folks on the ground in Nunavut to put in place some infrastructure that would aid in the development of the commercial fishery—in that area, at least. It wasn't just a wharf project; there was a science component of the project, specifically for the reason that we understood this was going to increase local fisheries pressure. I'd look back to that for a model for the future.

As these fisheries continue to emerge and develop, we'll need to clearly identify our needs to respond and, through partnership, make sure we can provide the advice.

The Chair: Thank you very much, Mr. Chisholm.

Mr. Weston.

Mr. John Weston (West Vancouver—Sunshine Coast—Sea to Sky Country, CPC): Thank you very much, Mr. Chairman.

I have two questions, the first to Mr. Burden.

What government agencies have jurisdiction over this fishery?

The second, to each of you, is this. Looking ahead for a 20-year period, as Canadians, what would you identify as the one or two most critical issues you would like to see your fisheries committee address in a study such as this, which is quite remarkable?

Mr. David Burden: The first part of your question depends on where we are in the Arctic and what type of fishery we're talking about. If it's the recreational fisheries, much of the fisheries management side of it is delegated to the territories. We provide the scientific research to support them; the enforcement is done by their folks with support from us.

When we're talking about the commercial fisheries and the science across the whole spectrum, that's a DFO responsibility, and again it's with our co-management partners, the Nunavut Wildlife Management Board—or in the western Arctic, the Fisheries Joint Management Committee—and the territorial governments.

Mr. John Weston: In terms of sovereignty, there could be other issues involving such agencies as Defence and PMO and Indian Affairs.

Mr. David Burden: In anything we're doing in the Arctic, because of the land claims agreements, Aboriginal Affairs and Northern Development is a partner that is always there. When we're into oceans management and some of the broader aspects of our mandate, the federal family is there, but the actual management of the fishery is with the Minister of Fisheries and Oceans.

That's not to say that Transport, DND, and all the other departments don't help us. Earlier I mentioned enforcement activities and that kind of stuff. If the military is doing an overflight for sovereignty patrols, we will often put one of our conservation and protection officer teams on the aircraft to enable multi-tasking to address that aspect. It's the same thing on our coast guard ships, when they are up in the Arctic. If they are going into an area, clearly we would use that opportunity. With any asset that's available to us, my people are very good at networking and pulling out whatever stops they can to increase our span of coverage. We've been very successful with this.

Where would we like to be in 20 years?

Mr. John Weston: What are one or two issues you would like us to focus on? We've covered many. I love to ask, before we embark on something, what we are aiming to accomplish.

Mr. Gillis, Mr. Hodgson, maybe you can chip in one issue, and that will give Mr. Burden a chance to think of one or two.

Go ahead.

• (1240)

Mr. David Gillis: I'll offer two.

We've covered one of them fairly well. From a science point of view—and it spills over into management and development, obviously—it's important to have a very strong table and a good, healthy dialogue among all the parties, including in this case in particular the northern residents, about their objectives for these resources and the area, and have that feed into a good prioritization and planning process, which we would have with them.

The other thing, from a science point of view, that I think all of us would really benefit from in 20 years is to be able to look back and see that we have been able to establish a sound and carefully designed monitoring system for ecosystems in the north, so as to ensure that we are in a position to support the decisions we want to make in relation to development, but also to see the changes we expect. It's to be able to see the effects of those over time.

Mr. John Weston: How much time do we have left?

The Chair: You have one minute.

Mr. John Weston: Okay, so you have 30 seconds each.

Mr. Blair Hodgson: I'll be quick, then.

I would agree with Dave's first point, concerning the interests of the north in the development of these resources and their perspectives.

I'll take char as an example. Char can serve as food; it can also serve as a source of revenue for recreational fisheries. It can also be for commercial fisheries. It's very much a choice at the community level of how they want to develop their resource to bring the maximum benefits to their community.

Mr. David Burden: From my perspective—we talked about the fisheries side—I'd look at how we balance the commercial and recreational components, as both my colleagues have said. But we want to be able to look at this question through the lens of resource extraction and what its potential is going to do. As you build

infrastructure for it, you're going to open up access to lakes and areas that have not been prosecuted in the past.

The other area we've been struggling with and have made—but are going to have to continue to make—progress on is how we balance our core, traditional science information to incorporate traditional knowledge of the Inuit and use it to frame our management and scientific decisions. What we have found is that for a lot of the stuff we don't know about, their traditional knowledge has been proven right, when we have figured out what we need to know.

Mr. John Weston: That's very interesting. Thank you.

The Chair: Thank you very much.

Mr. Woodworth.

Mr. Stephen Woodworth (Kitchener Centre, CPC): Thank you, Mr. Chair.

I appreciate the witnesses' comments.

I'm particularly interested in the delivery system of co-management. I would like to ask some questions about that. I wasn't sure, for example, whether there was a co-management board for each of the aboriginal or first nations settlement areas or treaty regions shown on the map on page 3. That's my first question.

If it isn't the case that there is a one-to-one correspondence, how many co-management boards are being operated through your department?

Mr. David Burden: We have the Canada Nunavut co-management board in the east, and in the Northwest Territories we have two major ones, the Inuvialuit and the Gwich'in. Then we have the Sahtu and the Tlicho. The majority of the fisheries management that we do in the west is coordinated through the fisheries joint management committee. So I meet with the committee twice a year, same as I do in the eastern Arctic, but my staff are working with them the same as in the east, on a daily, weekly, basis. We establish our plans and priorities and then throughout the year we do a check-in and see where we are. Each of those bodies prepares annual reports that are presented to the minister for his review and information and comment.

Mr. Stephen Woodworth: Is the Fisheries Joint Management Committee you mentioned an interior departmental committee, or is that a co-management board with others?

Mr. David Burden: No, that's under the land claims, and they report and provide guidance to the minister.

Mr. Stephen Woodworth: Let's just pick one, the Canada Nunavut co-management board. Can you give me a description of the extent of the responsibilities of that board?

• (1245)

Mr. David Burden: It is soup to nuts, I guess. In their case, they not only do the aquatic, but they do the terrestrial. So they would have the responsibilities for polar bear, caribou, and everything on the land. Anything that's related to wildlife management they deal with. On that side it's more Environment Canada that they deal with.

When I sit down and meet with them, I'm dealing with the marine mammals and of course the fisheries.

Mr. Stephen Woodworth: You'll have to forgive me because my knowledge of these matters is still pretty slender. I don't know, for example, whether or not the Canada Nunavut co-management board is in the business of setting quotas. Is that what they do?

Mr. Blair Hodgson: Okay. That's my territory.

Under the land claim, the Nunavut Wildlife Management Board has a role of providing advice to the minister. It's a bit different if it is within their territorial waters of 12 nautical miles, or outside of that, in an adjacent resource. Essentially they provide advice to the minister on total allowable catches. As well, if there is an allocation to the Nunavut Wildlife Management Board, they would then advise the minister on how they would like to see that suballocated between commercial entities in Nunavut.

Mr. Stephen Woodworth: You're talking about allocations and it sounds to me like what I might call a quota.

Mr. Blair Hodgson: Yes, it would be an allocation. The quota is the annual amount, and then they divide it up amongst organizations.

Mr. Stephen Woodworth: In terms of fisheries, does that board have anything to do with processing or marketing of the catch, or is that all done through private sector means?

Mr. Blair Hodgson: I think that would be private sector.

Mr. Stephen Woodworth: Is it pretty much a standard that these co-management boards leave processing and marketing to private sector interests? Or do any of them get involved with it?

Mr. David Burden: I'm not quite sure. Let me give you a couple of examples. The Pangnirtung processing plant that we've talked about is partially owned by the Nunavut government, which has a share in it, as do several of the communities.

There are arrangements between fisheries enterprises, some wholly owned by Inuit, some partially owned by Inuit, but all

prosecuting the fisheries that we're talking about under an authority granted by the minister through information and support from the Nunavut Wildlife Management Board.

Mr. Stephen Woodworth: And do any of the co-management boards we're speaking about have authorization to engage in regulatory enforcement, or is that all thrown back on you and the other government agencies?

Mr. David Burden: The enforcement under the Fisheries Act is done by our conservation and protection folks.

Mr. Stephen Woodworth: In the material there was mention that

The Chair: I think you're out of time.

Mr. Stephen Woodworth: Thank you very much, sir.

The Chair: Thank you very much, Mr. Woodworth.

Gentlemen, I want to take this opportunity to thank you very much on behalf of the committee for coming today and providing us with a mountain of knowledge here and a lot of information. I'm sure that as committee members take the time to go through some of this information you provided, we'll be back to you again for some more assistance as we go forward with this report.

At this point in time, I'd like to say thank you very much to our guests for being here today and providing us with this help.

Committee members, I just want to let you know that for the report we completed on aquatic invasive species, as far as I'm concerned, everything is in place for me to be in a position to table it on Thursday. I just wanted to let you know that.

There being no further business, this committee stands adjourned to the call of the chair.

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