



House of Commons  
CANADA

## **Standing Committee on Fisheries and Oceans**

---

FOPO • NUMBER 033 • 1st SESSION • 38th PARLIAMENT

---

**EVIDENCE**

**Tuesday, April 19, 2005**

—  
**Chair**

**Mr. Tom Wappel**

All parliamentary publications are available on the  
"Parliamentary Internet Parlementaire" at the following address:

**<http://www.parl.gc.ca>**

## Standing Committee on Fisheries and Oceans

Tuesday, April 19, 2005

•(1105)

[*English*]

**The Chair (Mr. Tom Wappel (Scarborough Southwest, Lib.)):** I now call the meeting to order.

This is meeting 33, pursuant to Standing Order 108(2), a study on aquatic invasive species. Just so committee members know what is going on in terms of witnesses, we have, as you can see, a whole number of people here, but there will be only two presentations today—one by Robert McLean from Environment Canada, and one by Serge Labonté and Dr. Wendy Watson-Wright from DFO. Then we'll go into questions.

Now, the reason the other people are here, colleagues, is because should some of the questions delve into areas that impact on some of the other departments or someone else who might have more expertise, they can answer those questions.

On Thursday we will have four presentations, including one on ballast regulation, one on trade issues, and one on the environment commissioner. She'll be here, and she'll talk to us as the closing presenter at the end of those meetings, and then there'll be time for questions.

That doesn't mean that if you have questions today on ballast water regulations, ballast regulations, you shouldn't ask them. There are people here who should be able to at least answer specific questions.

Also, just as a reminder, on Thursday we'll be going from 9:30 to 11:30, as opposed to today's times.

First of all, welcome to all our witnesses, and just for the record, I'll introduce everybody—or at least I'll try to.

First, from the Department of Transport, Tom Morris, manager, environmental protection, marine safety, and Gerard McDonald, director general, marine safety; from the Department of Fisheries and Oceans, Dr. Wendy Watson-Wright, assistant deputy minister, science, and Serge Labonté, director general, fisheries, environment, and biodiversity science; from the Department of Foreign Affairs, Paul Martin—interesting name—director, technical barriers and regulations, and I'm not going to comment because you're probably sick of that, over the last 10 years or so; and from the Department of the Environment, Robert McLean, director general, conservation strategies.

Welcome to everybody. Our first presenter will be Robert McLean, who's no stranger to the committee on this issue.

Welcome, sir. You have up to 15 minutes.

**Mr. Robert McLean (Director General, Conservation Strategies, Department of the Environment):** Thank you very much, Mr. Chair.

[*Translation*]

I wish to thank the Committee for having invited us to come and share with it the collective progress we have made following upon its recommendations of two years ago.

I am pleased to say that we now have a national invasive alien species strategy that was approved last September by the federal, provincial and territorial ministers responsible for forestry, fisheries and agriculture, as well as for endangered wild species.

In my view, this is an excellent example of the concerted efforts deployed by federal departments along with their provincial and territorial counterparts in view of the establishment of an integrated management framework that they could all implement.

[*English*]

In addition to being simply a federal-provincial integrated plan, I should hasten to add that the strategy also belongs to the stakeholders, the interested organizations, and the individuals who participated in the workshops and provided comments during its development. They contributed in a constructive and meaningful way to the strategy.

The clerk circulated on my behalf a chart, which is in front of all of you. That first chart is the policy and management framework. The strategy is founded on four strategic goals: preventing the introduction of invasive alien species in the first instance—I'm speaking to the middle set of goals on the chart; early detection, should we not be successful in preventing invasive alien species from arriving in Canada in the first instance; rapid response to those early detections; and, in the worst-case scenario, managing those invasive alien species that have become established in the country.

Success in achieving these strategic outcomes will depend on risk analysis—these are the four pillars at the bottom of the chart—of priority pathways and species, new science and technologies, appropriate and effective regulatory frameworks, engaged Canadians, and agreed bilateral and multilateral international approaches and mechanisms.

The strategy places its highest priority on prevention. If Canada is to reduce the rate of introduction and prevent them in the first instance, we must tackle the pathways of introduction. By addressing these pathways we will be both more efficient and more effective in the long term.

The second page in the handout identifies the priority pathways of introduction, both what we call intentional as well as unintentional. That's provided for background information. I won't be elaborating on those particular pathways of introduction during my presentation.

Since federal-provincial-territorial ministers approved the strategy last September, we have been building the case for enhancements to Canada's capacity to prevent and manage invasive alien species. The reference to invasive alien species in last fall's Speech from the Throne identified this issue as a priority for action in working with the United States on environmental matters.

The important need to initiate further action on invasive alien species was also recognized in the recent federal budget announcements. An additional targeted investment of \$85 million over five years is proposed to be added to the current Government of Canada annual investment of approximately \$85 million to address invasive alien species. These new resources would be used strategically to address the critical unintentional pathways of introduction.

As my colleagues this morning will be speaking to aquatic invasive species, I would like to share with the committee some brief information on invasive plants and plant pests.

The current effort on terrestrial plants has focused on pests that cause significant harm to our agriculture and forest sectors. The Canadian Food Inspection Agency, Agriculture and Agri-Food Canada, and the Canadian Forest Service of Natural Resources Canada lead this effort. The proposed new resources would be directed toward developing new measures to prevent invasive plant introductions in priority pathways, particularly seeds and grains in the horticulture industry; better preventive measures against plant pests; a national surveillance program; early detection and rapid response; and a plant protection network, basically a science network to improve the information we have on invasive plants.

From an Environment Canada perspective, we will be working in a coordinated manner with our federal colleagues, provinces, territories, industry stakeholders, and non-government groups to promote performance and develop education and awareness materials so everyone in Canada can do their part in the prevention and management of invasive alien species. We will be addressing aquatic and terrestrial invasive alien species.

We are currently drafting a public education and awareness program. Early thoughts on the kinds of activities that we could support include: targeted initiatives with stakeholders, particularly industry sectors and consumers of invasive alien species and other activities that contribute to their threat; an invasive species website as a federal and national portal to quick and easy access to information and programs on invasive alien species; information products to help identify invasive alien species; and education curricula for secondary schools. Essentially it would be a sharp focus on what I would characterize as awareness that changes the behaviour of industry and Canadians so that we can actually make meaningful progress in reducing the rate at which invasive alien species are coming into Canada. We would also have some broader communications products to educate the public about invasive alien species and deliver broader key messages, but our focus would be on communications that make a real difference.

•(1110)

Shifting now to aquatic invasive species, I will make three very brief comments and leave additional comments to my colleagues. The recent budget announcement would double the resources to the Department of Fisheries and Oceans, increasing its funding from approximately \$2 million to \$4 million annually for aquatic invasive species. With respect to the sea lamprey control program, to which the committee previously drew attention, there would be an additional \$2 million annually invested in the program. I expect the committee is aware of that already. Finally, through the oceans action plan, an initiative led by the Department of Fisheries and Oceans, the budget would provide an additional \$1 million over two years to address the regulatory enforcement of the Canada Shipping Act and ballast water regulations.

I should add that we're still in the process of securing the funding, so those amounts are still notional at the moment. They would make a huge difference to the efforts that we are all making federally to take action on invasive alien species.

I won't take more of your time, but I would be happy to address any questions in the areas for which Environment Canada has lead responsibility.

In closing, I would like to thank the committee for the continuing attention it is bringing to the important economic, social, and environmental issues that invasive alien species represent and for the opportunity today to update you.

Thank you.

•(1115)

**The Chair:** Thank you, Mr. McLean.

Before we go to our next presenter, just remind us, what is Environment Canada's responsibility in this puzzle?

**Mr. Robert McLean:** The focus at the moment is on public awareness and education. The other aspect of the file that I didn't touch on in my remarks relates to terrestrial animals. We have legislation in the department, which I mentioned when we last met, an act called the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act, and for short I'll call that PPRITA, if we have to come back to it during the meeting this morning. Through that legislation we regulate, for example, the Asian raccoon dog and all species of the starling family, except the myna.... There are a number of invasive alien species already listed and controlled under that legislation.

So public awareness and terrestrial animals are two key roles.

**The Chair:** Thank you.

Now we'll go to Dr. Watson-Wright and Serge Labonté from DFO.

[Translation]

**Dr. Wendy Watson-Wright (Assistant Deputy Minister, Science, Department of Fisheries and Oceans):** Thank you very much, Mr. Chairman, and thank you to the Committee for this opportunity to appear before you today to discuss aquatic invasive species.

[English]

I'll take a few minutes to highlight the government's progress, especially as it relates to the Canadian action plan on aquatics and the sea lamprey control program. I would also like to highlight some of the other achievements from the past year.

I believe my presentation has been handed out to people, so you could follow the deck.

Slide two just gives you a timeline, which you probably know better than I. The report of this committee was released May 2003, the government response was given in October 2003, and we appeared again before this committee last May to report on progress. In February, Budget 2005 was announced, which, as Bob alluded to, included new investments to address invasive species. I think probably all of us here are happy to say it includes new funding for the sea lamprey program and for partial implementation of the Canadian action plan to address aquatic invasive species.

I'll just use the acronym AIS for aquatic invasive species from here on.

More recently, Prime Minister Martin and Presidents Bush and Fox committed to working cooperatively to combat the spread of invasive species in both coastal and freshwater areas. Clearly, addressing the threat of AIS remains a high priority for the federal government.

National action is being led and coordinated through the cooperative efforts of a number of federal, provincial, and territorial agencies, which, again, Mr. McLean alluded to. You have already heard of the Environment Canada role in leading the coordination. DFO has the lead on aquatic invasive species. We, in the person of Serge Labonté, co-chair, with the Province of Ontario, the Canadian Council of Fisheries and Aquaculture Ministers' Task Group on AIS. This task group has developed the Canadian action plan.

Transport Canada also, of course, plays a role, which we're well aware of, and as you know, Transport is responsible for ballast water management under the Canada Shipping Act and leads Canada's participation in international initiatives such as the International Maritime Organization.

Now for some information on the Canadian action plan on aquatics. The CCFAM task group developed a proposal for the Canadian action plan to address the threat of AIS. The task group did consult quite broadly with organizations and concerned individuals as well on the proposed plan. The organizations consulted with included the Great Lakes Fishery Commission, the International Joint Commission, and the Ontario Federation of Anglers and Hunters, although those certainly weren't the only organizations with whom the task group consulted.

In September of 2004 CCFAM approved the plan, and they have asked that an implementation strategy be developed with costed

options. The goal of the plan is to minimize further unintentional and unauthorized introductions of AIS, using socio-economic risk management analyses and science-based techniques to inform decision-making and to assess and mitigate risks. The plan includes both unintentional and unauthorized introductions, and it takes a pathways approach to identify how species enter and spread through Canadian waters.

On slide five you can see the priority pathways that are being addressed. The first is shipping, which is the largest source of introductions of AIS. Then there are recreational and commercial boating, the aquarium and water garden trade, and the live food fish trade. The concerns there include the accidental release of live fish or the unauthorized disposal of transport water. The transport water could of course be housing invasive hitchhikers and be released. The fifth is the use of live bait. The sixth is unauthorized introductions, and this reflects any introduction or transfer of fish not authorized by a federal, provincial, or territorial fisheries management agency.

I would like to stress, though, that it does not include aquaculture, which is addressed in the national code on introductions and transfers of aquatic organisms.

The seventh pathway is canals and water diversions, a topic receiving some press these days.

The strategic management framework of the plan reflects management tools that are available to governments in cooperation with stakeholders. As we know, invasion pathways often cut across multiple jurisdictions and agencies, so the plan does recognize that effective leadership, coordination, and cooperation at all levels are imperative for any success.

It identifies four main implementation activities. The first is legislative and regulatory measures, which are one of the strongest tools available to governments, but again, the complex and overlapping jurisdictions do require coordination and harmonization.

• (1120)

The second is risk management, which includes early detection and rapid response and control and eradication measures. The early detection and rapid response would be to stop new invasions, and the control and eradication would be to address existing invaders.

The third is stewardship, education, and awareness, which are the primary means of preventing unintentional introductions. I think this committee has in the past stressed the importance of public education in this matter.

Finally, there's science, which includes surveillance, monitoring, research, and risk analysis. I think most would agree that management actions must be science-based.

Since the CCFAM approved the plan last September, the task group has been drafting the implementation strategy with costed options. The task group has set priorities within a cost-effective framework, recognizing the fiscal limitations that are faced by all jurisdictions.

Five key priorities have been identified in the short term. These are governance, early detection/rapid response, risk assessment, engaging Canadians, and the AIS action program. The task group will present these implementation strategies to the CCFAM for approval this coming September, 2005.

As I mentioned earlier, and as was also mentioned by Mr. McLean, Budget 2005 included new investments to address invasive species, including AIS. This will allow us to partially implement the Canadian action plan. The investments through DFO of \$2 million per year for the next five years will allow us to focus on priority action areas. These would include risk assessment, early detection, some research, and information management. Again, the resources in the oceans action plan will assist on invasives as well.

The budget also included new investments for the sea lamprey control program, and I'd like to turn to that program now. Again, I think this committee is well acquainted with the history—that the Great Lakes Fishery Commission was established by the Great Lakes Fisheries Convention Act in 1955, and both DFO and the United States Fish and Wildlife Service were contracted as federal agencies responsible for administering the program. I must say, having recently joined the GLFC as a commissioner, I'm very impressed with how well the two countries work together within this organization.

In the past, DFO has provided long-term, stable funding for the program in the amount of \$6.1 million; I recognize that some would say "static" and some would say "stable", but it was \$6.1 million. The announcement in the federal budget is a welcome announcement for all of us. The additional \$2 million per year will bring Canada's annual contribution to \$8.1 million. I believe there are organizations out there that have committed to raising more money if the government raised it to \$8 million, so we look forward to that.

The sea lamprey control is comprised of five major programs, noted on slide ten. The control program primarily uses liquid lampricide to remove 95% to 98% of sea lampreys from nursery streams before they have time to parasitize the fish populations.

The assessment program routinely surveys the Great Lakes tributaries to look at the distribution and abundance of sea lampreys within the nursery streams. That allows more accurate direction of the treatments.

The sea lamprey barriers block the passage of sea lampreys while allowing passage of migratory fish that have the ability to jump over the low obstacles. This limits, actually, the amount of spawning and nursery habitat that is available to sea lamprey.

The fourth is traps, which are used in conjunction with barriers to provide an additional method to remove sea lampreys from streams. These traps also facilitate the passage of non-jumping fish species beyond the barriers.

Finally, sterile male release is a technique where chemo-sterilized male sea lampreys are released into the St. Marys River to compete with fertile males for fertile females. Currently this technique is limited to the St. Marys River, which, as you know, is the connecting channel between Lakes Superior and Huron. This is because the use of conventional control methods like lampricides in such a large river system are not cost-effective.

In terms of success, I think one can say the sea lamprey control program, since its inception in 1956, has had great success. It has reduced the sea lamprey populations in the Great Lakes by 90%. Lake Superior has shown the greatest success to date: lake trout have recovered to the point where commercial, sport, and aboriginal fisheries are again possible.

● (1125)

In the St. Marys River, the sterile male release program, along with the trapping and spot lampricide treatments, have reduced the abundance of sea lamprey larvae in the river by 60%. In turn, this has contributed to the decline in parasitic sea lamprey abundance in Lake Huron by 50%.

Although the program has recognized several success stories, I'd say that sea lamprey control remains a vital component of fisheries management within the Great Lakes.

As to future direction, there are exciting new areas. I would say the goal of the Great Lakes Fisheries Commission is to reduce and maybe even eliminate the use of lampricide at some point. It's recognized that it's not the ideal method, but it is the most effective at this point.

Pheromone research could provide the ability to attract lampreys first to specific streams and then to specific areas within streams where they can be trapped and removed from the population. The male sea lampreys captured by this method can be used in the sterilization technique, and this would further reduce the numbers of lamprey that successfully spawn.

Enhancing current control methodologies will improve the effectiveness of lampricide treatment. Here we're talking about using new and improved models for the time, length, and amount of treatment. When, for how long, and how much you put in there—this is very important. So the models are improving as we go along.

With respect to additional effort for stock assessment, we'll identify the extent to which lampreys use offshore lentic areas in lakes and embayments as nursery habitats. This helps the researchers to devise control strategies to target the populations in those areas.

Finally, additional funding will help control agents to identify populations of indigenous lampreys that may be adversely affected by control activities, including their critical habitats, and to contribute this information to the species-at-risk database.

In addition to the sea lamprey control program, DFO is involved in other control and prevention activities. As an example, DFO and Transport Canada work closely together on ballast water issues. We provide the science advice to Transport Canada regarding ballast water standards and regulations. In fact, last December DFO conducted a formal peer review of science advice on alternative ballast water exchange zones for the Pacific coast, the Scotian Shelf, and the Laurentian Channel. The science advice was peer reviewed by an international group of science experts that included government, academia, non-government organizations, and industry. We presented this advice to Transport Canada this past January to help inform the regulatory decision-making.

Also related to control and prevention, DFO has conducted a qualitative risk assessment of four species of Asian carp—that is, grass, bighead, silver, and black carp. This risk assessment drew heavily on American research and risk assessments. The risk assessment was peer reviewed again by national and international scientific experts at a workshop this past October. A number of American scientists participated and shared their expertise at the workshop, and we found this very helpful.

The peer review concluded that the four species of Asian carp have a high probability of becoming established in Canada and of causing significant ecological disturbance.

The committee, I believe, will be discussing Asian carp and the status of regulations on Thursday.

I'll now turn to some key accomplishments related to research. DFO is supporting an invasive species research chair held by Dr. Hugh McIsaac at the University of Windsor. The purpose of the research chair is to investigate new vectors and impacts of aquatic invasive species. DFO and Dr. McIsaac have developed a Canadian network of researchers. Currently about 32 scientists from government—not just DFO but other government departments as well—and from 14 universities are working closely in the network. The universities go from coast to coast.

DFO has committed a million dollars in cash and a million dollars in in-kind contributions over the five-year span of the network. We are also supporting a Natural Sciences and Engineering Research Council proposal for network funding. We should hear by the end of May whether we are successful with that NSERC proposal.

• (1130)

Then, within the department, the science sector conducts research and provides advice on the environmental impacts of aquatic invasive species and on the environmental effectiveness of various control and management options. In the last fiscal year we reallocated within the department nearly \$0.5 million for scientific research addressing AIS. The funding was directed to the high-priority issues, for example, the processes influencing the establishment of AIS in the Gulf of St. Lawrence, as well as the risk assessment of Asian carp, which I just mentioned.

We've also initiated a pilot project for a web-based GIS-enabled AIS database. This database will allow users to look at the spread of invasive species over time in marine and freshwater ecosystems. Of course, the ultimate objective is to link together the many different data sets into a GIS interface. This database should, and I think will, enhance information sharing among jurisdictions and stakeholders.

In conclusion, I have tried to highlight some of the key achievements related to aquatic invasive species over the past 12 months. I hope they demonstrate that the federal government is responding to the threat of aquatic invasive species. Addressing aquatic invasive species does continue to be a government priority, and our next steps will include receiving CCFAM approval of the implementation strategy for the Canadian action plan and beginning to implement the high-priority areas of the Canadian action plan, as resources permit.

[*Translation*]

Once again, thank you, Mr. Chairman, and thank you to the Committee.

[*English*]

I look forward to responding to questions.

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

A very interesting presentation. Unfortunately, for me, it just ended flat with your last three words, “as resources permit”. Unfortunate.

Before we go to questioning, I have here something called “Addressing the Threat of Invasive Alien Species: A Strategy for Canada”. It's a draft dated March 2004.

Mr. McLean, I presume this is the draft you were talking about, which is the national strategy. Is that correct?

**Mr. Robert McLean:** Yes, that is correct. I left updated versions of that strategy with the clerk this morning.

It's essentially the same document. There are no vast differences between the document you just had in your hand and the version I left this morning.

• (1135)

**The Chair:** That's the first question.

There was a proposal for an action plan, a Canadian action plan. We have a copy, which is a draft dated August 12. Dr. Watson-Wright, you said the ministers approved that.

My second question is, do you have the final version, and if you do, can you make it available to us?

**Dr. Wendy Watson-Wright:** Yes.

**The Chair:** I know you can't make it available instantaneously, but it would be nice if we could have it, let's say, for Thursday.

**Dr. Wendy Watson-Wright:** Sure.

**The Chair:** You mentioned a risk assessment on slide 14 regarding Asian carp. Do you have that risk assessment? Can we have a copy of that as well for Thursday?

**Dr. Wendy Watson-Wright:** Yes, you may.

**The Chair:** Finally, you mentioned a draft implementation strategy in your slide. I believe it is to be implemented or approved by the ministers more or less in September of this year. Do you have a copy of the draft?

**Mr. Serge Labonté (Director General, Fisheries, Environment and Biodiversity Science, Department of Fisheries and Oceans):** This is a document in progress, Mr. Wappel.

**The Chair:** Meaning there is no document, or you'd rather not give it to us, or it's...?

**Mr. Serge Labonté:** It's a working document at this point. The task group is still working on it as we speak.

**The Chair:** When do you think it might be finalized, in terms of giving it to the ministers to take a look at?

**Mr. Serge Labonté:** It's supposed to be finalized by June.

**The Chair:** By June. Well, who knows what's going to happen in June, eh?

All right, our researchers will mark it down and we'll see what the calendar brings. Thank you very much.

Now we'll go to Mr. Keddy, then Monsieur Blais, and then Mr. Stoffer.

Mr. Keddy, away you go.

**Mr. Gerald Keddy (South Shore—St. Margaret's, CPC):** Thank you, Mr. Chairman.

Welcome to our witnesses.

I wasn't on the committee when the recommendations were passed to the minister on invasive species, but I've certainly spoken about invasive species a few times since I've become a parliamentarian. I can't imagine that professionals working for the Department of Fisheries and Oceans, with some fairly extensive resources at their fingertips, would have such a minor problem as invasive species to deal with, as far as a number of the issues go—sea lamprey, ballast control, and after 13 years not even have a working paper in front of the minister to do something about it.

I don't mean to sound disrespectful to our witnesses, because it's not their fault. Any government at any given time is responsible for bringing in legislation to handle problems that arise, but we're talking about ballast control, ballast water. It's childish. It's a stain upon the face of the government that we don't have any controls to prevent invasive species in ballast water.

I'm sure the committee went through it prior to my sitting on this committee, but you take your ballast water before you dump it, you put it through some type of mechanical device that crushes up any large organisms, and you heat the water. This is not technology; this is a blender and a hot water heater. For some of the smaller organisms it's as simple as using ultraviolet light. There are a number of patents on the market today, but you need to have some political will somewhere.

Ms. Watson-Wright, where's the political will to simply say we're going to use a mechanical device of some sort to kill any large organisms on board all ships coming into Canadian waters, that we're going to make sure it's heated or treated with chemicals, or treated with ultraviolet light before it goes overboard?

That's not going to prevent all the invasive species that stick to the outside of the hull and come in by other means, but for that issue

alone, for ballast water—correct me if it's more complicated than that.

**Dr. Wendy Watson-Wright:** I'll start, with your indulgence, Mr. Chair, and then I'll defer to my colleagues in Transport.

It is a very complex issue in fact.

• (1140)

**Mr. Gerald Keddy:** Let me ask another question—to kill the organisms?

**Dr. Wendy Watson-Wright:** Yes, because there are many different organisms.

**Mr. Gerald Keddy:** In the ballast water?

**Dr. Wendy Watson-Wright:** That's correct.

So the blender and the hot water might work for some, but it won't work for all.

**Mr. Gerald Keddy:** Well, give me an example.

**Dr. Wendy Watson-Wright:** I don't have those names for you. I can certainly come up with them, but there are anoxic, aerobic, heat tolerant, heat aversive, cold tolerant, cold aversive.... It depends on a whole range of factors on the science side of the thing, but I would defer to—

**Mr. Gerald Keddy:** Just a second. You can just delay your answer for a minute. The zebra mussels that stick to the outside of a vessel are one thing. But for anything that's in the ballast water, put it through a blender, heat the water to 200 degrees, boil it if you have to. I don't care what you have to do, but this is not technology. This is not science fiction. There are a number of patents already on the market that are being used in other places.

You can go into the big scientific explanations—anaerobic bacteria—but just give me an example of something that can't be treated. If you have to add chemicals to it, if you have to add ultraviolet light to it.... I'm cutting you off here, and I apologize for that, but maybe we missed something in that. We get 99.9% of it; you have to give me an example of what we're going to miss.

**Dr. Wendy Watson-Wright:** There is nothing, to my knowledge, that destroys 100% of the organisms at this point—and that's what we really need in the ballast water—that is not cost-prohibitive. But having mentioned that word, I will pass it over to Transport.

**Mr. Gerald Keddy:** Okay.

**Mr. Gerard McDonald (Director General, Marine Safety, Department of Transport):** With respect to technology, I'm certainly no scientist or expert in technology, but the maritime industry has been working very diligently over the past number of years to try to come up with acceptable technology to effectively treat ballast water. This has been recognized in the international conventions we've recently negotiated and agreed to with the international community.

Obviously ballast water is not solely a domestic issue; it's something that has to be dealt with on an international basis because there are no borders in shipping. We accept international ships into our waters at all times. So we have to ensure that whatever we're going to accept is acceptable internationally and can be proven to work internationally.



We've been working with a lot of Canadian companies, and participating and cooperating with our colleagues in the U.S., to try to come up with acceptable technologies that will deal with ballast water issues. Yes, there are certain processes that seem to provide some results, but obviously whatever we regulate or insist upon being on a ship, we have to be sure it meets a performance standard that is acceptable to the community in general.

So it's something we are working toward. The performance standard has been agreed upon internationally, but I think it is accepted right now that with the technology that's out there, there is no single process that meets the current performance standard that has been agreed to internationally. So there's a lot of work to be done. We plan to invest in research in that regard and—

**Mr. Gerald Keddy:** Excuse me. Do we need to have a performance standard that is accepted internationally to enforce that standard for all shipping in Canadian waters and to say, "If you're going to ship into Canadian waters, these are the minimum criteria you need to have in place to handle your ballast water"?

**Mr. Gerard McDonald:** We feel it's more appropriate to work toward an international standard than apply something domestically, because obviously international ships are coming into our waters.

**Mr. Gerald Keddy:** I appreciate that, but do you need to have an international standard accepted by all international shippers to tell a British ship, a Russian ship, or a Chinese ship that this is what they must have on board to treat ballast water when they come into Canadian waters?

• (1145)

**Mr. Gerard McDonald:** You do not, but you risk turning away shipping to Canada.

**Mr. Gerald Keddy:** I appreciate that, but...

How much time do I have left?

**The Chair:** One minute and 30 seconds.

**Mr. Gerald Keddy:** Okay, I have to get off my soapbox and try to be quick here.

I'm going back to my original statement. Fifty percent would be better than nothing. I'm sorry, we're sitting on nothing. If we had mechanical devices to take out the bigger animals, the bigger plants... And we're not talking about something that costs \$1 million to put on board a ship; we're talking about something that's in the hundreds of thousands of dollars. And it's not weight; it's not going to replace a container in weight on board a ship.

There are other things we can do here. Freshwater ballast doesn't have to be dumped in fresh water. Freshwater ballast can be dumped in salt water. Very few freshwater organisms can survive in salt water unless they've had time to acclimatize to it. There are very few saltwater organisms that survive in fresh water for any length of time. There are a number of things we can do that are pretty basic stuff.

I'm not blaming you guys. You guys are simply the messengers. I don't care what the political stripe is of whatever government is in power; we've done nothing on invasive organisms. If you look at the sea lamprey... There are two lakes in Nova Scotia that have sea trout, Grand Lake and Sherbrooke Lake. Sherbrooke Lake is close to

where I live. They put a fish ladder in Indian Falls back in the early 1960s—blew the face off the cliff so the salmon could get up across the Indian Falls, when a few managed to get up anyway—and we ended up with sea lamprey in Sherbrooke Lake. It was a matter of putting some devices into the fish ladder to keep the sea lamprey out, and we don't have sea lamprey in Sherbrooke Lake.

I realize it's more complicated than that in the Great Lakes, and there are a lot more, but you control 90% of it. It's going to cost money, and it's going to take government will, but 10% of nothing... We've done nothing on ballast control, so 10% would be a help.

Maybe I'm oversimplifying it. I recognize that. I'm not pretending to be a scientist, but if you give me an example of something that'll survive that very rudimentary device I just described, then I'm willing to say maybe we should wait another ten years—and have another 50 or 60 invasive species in this country—before we do something about it.

**The Chair:** Thank you, Mr. Keddy.

Dr. Watson-Wright, maybe for Thursday you might be able to identify a species that wouldn't survive the B and B technique—blender and boiling.

**Dr. Wendy Watson-Wright:** I think we can probably come up with one, yes.

**The Chair:** Before we go to Mr. Blais, for the benefit of the committee, in our 2003 report we had the following sentences regarding ballast water:

Canadian ballast water regulations for the Great Lakes and St. Lawrence River under the CSA are being drafted and are to be harmonized with U.S. requirements. Promulgation may be as early as 2004.

Mr. Morris, who is here, was here last year, and he said he hoped—and I stress the word "hoped"—that a national ballast water exchange regulation would be in place by the end of 2004. Before we go to Mr. Blais—it is now the first quarter of 2005—was your hope realized, Mr. Morris?

**Mr. Tom Morris (Manager, Environmental Protection, Marine Safety, Department of Transport):** No, it was not, but—

**The Chair:** There's a surprise.

**Mr. Tom Morris:** —we'll explain that further in our presentation on Thursday. But we are in the final drafting stages.

**The Chair:** Great.

Mr. Blais.

[*Translation*]

**Mr. Raynald Blais (Gaspésie—Îles-de-la-Madeleine, BQ):** Thank you, Mr. Chairman.

I would like to state at the outset that I share in Mr. Keddy's comments and frustration. I will however allow you to express yourself at greater length so as to appease our frustration.

There are more and more cruise ships plying the waters of the St. Lawrence. Is that a concern of your committee?

[English]

**The Chair:** Do you want to answer that question?

• (1150)

**Mr. Gerard McDonald:** Sure.

It doesn't matter what type of ship we're talking about, whether it's a cruise ship or any other type of ship; the regulations we're looking at would apply to all types of vessels.

**The Chair:** But the question was, are you concerned that cruise ships, as distinct from freighters, would be bringing in invasive species? I believe that was the gist of the question.

**Mr. Gerard McDonald:** We're just as concerned about cruise ships as we are about any other type of ship.

**The Chair:** Thank you.

Mr. Blais.

[Translation]

**Mr. Raynald Blais:** In other words, this is part of your work, no more, no less.

I wish to repeat that I share Mr. Keddy's frustration. Why is this situation so complicated? Despite all that we know, and that we have known for a long time now, how is it that there is still no action plan in place? Why is it that no action plan has been implemented?

**Mr. Gerard McDonald:** An action plan or regulations?

**Mr. Raynald Blais:** An action plan.

**Mr. Gerard McDonald:** Very well, but as we have already stated, we are in the process of making regulations. Unfortunately, it takes time.

**Mr. Raynald Blais:** Why?

**Mr. Gerard McDonald:** Because we must carry out consultations. We must consult Canadians as well as people in the industry so as to ensure that they agree with what we propose to do.

**Mr. Raynald Blais:** What consultations are you having with Canadians? What questions are you asking them? When did you consult them?

[English]

**Mr. Gerard McDonald:** We've had a number of consultation sessions. We have a standing marine consultation group, the Canadian Marine Advisory Council, which operates in all regions in the country as well as nationally, on a biannual basis. We have also had special meetings with respect to ballast water and the proposed regulations. As well, with respect to the regulations, we have to be sure, in whatever we are proposing with respect to how the regulations operate and alternate ballast water exchange zones, that whatever recommendations we make are backed up by appropriate scientific advice. Obviously, the studies had to be done to provide that advice to us before the regulations could be finalized.

[Translation]

**Mr. Raynald Blais:** I come back to the answer you have just given me. You stated that you have consulted Canadians.

**Mr. Gerard McDonald:** Yes.

**Mr. Raynald Blais:** Where? When? How? Who? Which Canadians have you consulted? When did you consult them? What questions did you put to them? You talked of Canadian consultations. Perhaps I do not have the same understanding of the word "Canadian". To my mind, this refers to the entire population. For you, who are these Canadians?

[English]

**Mr. Gerard McDonald:** As I said, we have biannual meetings of the Canadian Marine Advisory Council. These meetings are open to all Canadians who wish to attend to discuss marine issues. Of those issues, we have discussed the ballast water issue and the development of the regulations therein. They're held in every region in the country, twice per year, as well as nationally.

[Translation]

**Mr. Raynald Blais:** Who are the people that make up the advisory council?

[English]

**Mr. Gerard McDonald:** Whoever wishes to attend.

[Translation]

**Mr. Raynald Blais:** Who are the people who make up the committee that hears the people who come to speak with you?

[English]

**Mr. Gerard McDonald:** That would be the representatives of the marine safety organization, as well as representatives of Fisheries and Oceans, and Environment Canada would be there as well.

[Translation]

**Mr. Raynald Blais:** This is therefore the kind of consultation that you do twice a year?

[English]

**Mr. Gerard McDonald:** Yes.

[Translation]

**Mr. Raynald Blais:** Where and when? In 2005, where will these meetings be held?

[English]

**Mr. Gerard McDonald:** In 2005 we had meetings in St. John's, in Moncton, I believe, in Montreal—were the Quebec ones in Montreal or Quebec City this year?—in Toronto, Vancouver, and—

• (1155)

[Translation]

**Mr. Raynald Blais:** Let us just take those cities as examples. When are the meetings in these cities planned on being held?

[English]

**Mr. Gerard McDonald:** The exact dates?

[Translation]

**Mr. Raynald Blais:** Yes.

[English]

**Mr. Gerard McDonald:** I'd have to get back to you on those. I can certainly give you all of the dates of all of the consultation sessions under the Canadian Marine Advisory Council.

[Translation]

**Mr. Raynald Blais:** What kind of promotion do you do with regard to these so-called public consultations?

[English]

**Mr. Gerard McDonald:** In terms of promotion, we did no active advertising in newspapers, if that's what you're referring to. They are standing consultation sessions that the marine industry is well aware of. We also have our websites, which—

[Translation]

**Mr. Raynald Blais:** If I understand correctly, you carry out your consultations by invitation.

[English]

**Mr. Gerard McDonald:** It's an open invitation to all who wish to attend.

[Translation]

**Mr. Raynald Blais:** You say that they are open, but if you do not promote them, they cannot be open.

[English]

**Mr. Gerard McDonald:** We didn't put advertisements in papers, no, but it's certainly open to anyone who wishes to attend.

[Translation]

**Mr. Raynald Blais:** Yes, but people must know where, when, etc. People must be made aware of this.

I simply wish to understand. I am not a court of the Inquisition, I simply wish to understand. When you say that you have consulted Canadians, the words “consulted Canadians” ring a bell in my head. This is how you expressed it, but it seems to me that you have not truly consulted Canadians. There is a committee that meets and that at one point or another offers people the opportunity to attend. There is however no promotion of these consultation sessions.

How then can it be said that Canadians are consulted? Perhaps some people are consulted, but in my view Canadians in general are not consulted.

Furthermore, with regard to Environment Canada, Fisheries and Oceans and Transport Canada, do you hold multipartite meetings? Is it possible for representatives of Foreign Affairs to attend as well? Is there some committee? What is the frequency of your meetings? I wish to know if you work as a closed shop or not. It is as simple as that.

**Dr. Wendy Watson-Wright:** To discuss aquatic species or invasive species?

**Mr. Raynald Blais:** All invasive species.

[English]

**Mr. Robert McLean:** In developing the strategy, we held a series of day-long workshops across the country, about seven or eight, in every region of the country. One additional comment on the workshops is that these were not simply people talking to an

audience and having people listen. Rather, what we did was we had breakout sessions. We rolled up our shirt sleeves and we really dug down into the details of the strategy and got some very meaningful feedback from the key stakeholders. We knew who those key stakeholders were, so we had broad communications. We worked federally; we worked through our provincial colleagues. And they contacted their own networks of organizations and individuals involved in invasive alien species. We had direct mail-outs to organizations that we know are involved in invasive alien species, and we did a web-based consultation, where people could go to our website and provide direct input into the documents, which were actually on the web.

So we used a kind of three-pronged approach to develop the broader invasive alien species strategy.

**The Chair:** Mr. Blais, just before we go any further, there are two things.

I think it's pretty clear that while the consultations vis-à-vis the ballast water regulations and that sort of thing would be in the broadest sense open to Canadians, they are really meetings of the stakeholders. An ordinary Canadian in Scarborough southwest would have great difficulty in finding out where they are, when they are, and even attending and making any comments. They would presumably be open, but I'm gathering it makes some sense to think that with very specific things like ballast water regulations, it's the industry and those who are primarily concerned that would input most of the time.

Technically, the answer would be yes, they're public, but in reality, it's a very closed society that deals with specific issues.

Mr. McLean answered the other part of it about the strategy.

My second thing about your questioning, Mr. Blais, is what is it that you want? Do you want the list of meetings that have occurred in the past, or do you want the list of meetings that are going to take place in the future, and from Transport Canada specifically, or either?

● (1200)

[Translation]

**Mr. Raynald Blais:** I want to understand what you are telling me. When you state that Canadians are consulted, I have my way of understanding that. I wish to understand what you really mean by “Canadians are consulted”. If I understand correctly, it is interested parties that are consulted but not Canadians. If you are telling me that Canadians are consulted, then I want proof of this. But I have no such proof. This is why I was asking you questions in order to determine if the public is informed and if you promote these meetings. If you had told me that interested parties are consulted by invitation and all the rest, it would be a different story. This is what I wanted to understand.

Now, I wish to better understand how you function with regard...

[English]

**The Chair:** By the way, Mr. Blais, you're way beyond your time. I was just trying to clarify what meetings you wanted or if you wanted to pursue this any further.

[Translation]

**Mr. Raynald Blais:** When he talks of the meetings planned for this year, I want to know where these meetings are planned on being held, when, who is invited to participate, who organizes them and how they are advertised.

[English]

**The Chair:** Now, this is with respect to the ballast water regulations?

**Mr. Raynald Blais:** Yes.

**The Chair:** Okay.

Mr. McDonald, in due course.

If you wouldn't mind, Mr. Morris, could you provide us with the where, the when, the who, what, why, etc., of the 2005 meetings from here on in? We won't worry about the past now.

**Mr. Gerard McDonald:** Most of the meetings have already taken place this year, Mr. Chairman.

**The Chair:** All right, then, why don't you give us the details of the 2005 meetings?

**Mr. Gerard McDonald:** Certainly, yes.

**The Chair:** All right. Good.

Mr. Stoffer.

**Mr. Peter Stoffer (Sackville—Eastern Shore, NDP):** Thank you, Mr. Chairman.

And thank you, ladies and gentlemen, for appearing before us today.

The sea lamprey funding program, is that per year, based on every year, or is it a multi-year funding process?

**Dr. Wendy Watson-Wright:** Sea lamprey was at \$6.1 million per year. It will now be at \$8.1 million per year.

**Mr. Peter Stoffer:** Is it five years, 10 years, or just...?

**Dr. Wendy Watson-Wright:** The additional \$2 million was for five years.

**Mr. Peter Stoffer:** That includes the \$6 million, which was already there, so it's \$8 million each year for five years?

**Dr. Wendy Watson-Wright:** That's correct. The \$6.1 million is within the department; it's A-based. The \$2.1 million comes from the MC, the memorandum to cabinet.

**Mr. Peter Stoffer:** Thank you.

On the Asian carp—correct me if I'm wrong—when we were holding hearings on this, we were told that the Asian carp is a very voracious invasive species, that it could do some really nasty things to our other fish stocks within the Great Lakes system. We made a recommendation that live Asian carp imports should be stopped.

That recommendation was two years ago. Are live Asian carp banned from importation within Canadian borders?

**Dr. Wendy Watson-Wright:** I'm going to ask my colleague to speak to that.

Mr. Labonté.

**Mr. Serge Labonté:** As mentioned last year when I appeared, we were proceeding to a risk assessment. This was tabled. The risk assessment of those carp basically concluded that of course there is a high risk of those fish becoming established and impacting on native resources. This particular assessment has been used to move up regulations.

One of my colleagues, Gilles Belzile, will be here Thursday to answer how the regulations are moving forward. He can give you details on that particular process.

On the ban of imports, I will refer that to my colleague at DFAIT.

**Mr. Peter Stoffer:** Mr. Martin.

I guess my problem is that we made this—

**The Chair:** Mr. Martin, did you want to make a comment about the ban on the import of Asian carp?

**Mr. Paul Martin (Director, Technical Barriers and Regulations, Department of Foreign Affairs and International Trade):** No, in fact I didn't. I don't know whether Asian carp imports are prohibited.

● (1205)

**The Chair:** They aren't. The committee recommended that they be prohibited, and we've gotten a lot of gobbledegook as to why not. We're just wondering what's going on. Apparently there were some trade issues. I gather we'll hear about it on Thursday from the international trade side—some retaliation from the United States alleged, things like that.

But you can't enlighten us in any way at this point?

**Mr. Paul Martin:** I think you've answered the specific question, Mr. Chairman.

**The Chair:** Mr. Stoffer.

**Mr. Peter Stoffer:** I guess my question is, Mr. Chairman—

**The Chair:** Don't ask me, I don't know.

**Mr. Peter Stoffer:** As a comment, this is the frustration I feel. We were told by everybody in our hearings that if live Asian carp get out into the open, we are in serious trouble. It is a high-risk invasive species. It's one of the nastiest ones.

You would assume because of the danger it can pose to our commercial, aboriginal, or recreational fisheries in the Great Lakes that we would do everything in our power to make sure this little creature never sets foot in our door.

That was two years ago. We still, today, April 19, 2005, have not got an answer. And it's frustrating, trust me.

Why have we not banned live Asian carp from within our borders? I have no idea who we would be offending by doing that. Is it a couple of restaurants in downtown Toronto? I don't know.

**The Chair:** Be careful there, Mr. Stoffer.

**Mr. Peter Stoffer:** No, but who imports it?

We know who imports it and the reasons why. Surely Canada can say, "No. No longer are we allowing this into our country." It shouldn't be that difficult, Mr. Chairman, but that's another story. We'll get those answers, hopefully, on Thursday.

My question for Dr. Wendy Watson-Wright is in regard to the overall budget we just received for DFO. Correct me if I'm wrong, but has the science department budget within DFO been reduced in any way with this recent budget?

**Dr. Wendy Watson-Wright:** The short answer is yes, although I don't know that we've completed the ins. There was an influx of some dollars, and we've been sorting that out with the various departments that are involved in the various initiatives. So there's some coming in and there's some going out.

**Mr. Peter Stoffer:** Okay, but overall, there's less than there was before.

**Dr. Wendy Watson-Wright:** I believe so.

**Mr. Peter Stoffer:** You said earlier, and I agree with you, that management decisions must be science based. If science is in any way being reduced in terms of its resources—which you said before, as permitted by resources—wouldn't that in turn possibly mitigate some management decisions down the road?

**Dr. Wendy Watson-Wright:** Not necessarily. I think it's important that we focus the science in the places where it's needed most. You've heard us say that we have undergone a science review within the department over the past year. In fact, what we've been trying to do with that is to ensure that the science is aligned with the highest priorities. Invasive species would be one of those high priorities.

I did mention earlier that we realigned within the department toward invasive species. That means we'll be aligning away from other areas, and those would be areas that we considered to be of lower priority.

I think the importance here is that we focus the science on the high priorities and not think we have to do all science for everything, at all times, until the end of time.

**Mr. Peter Stoffer:** I agree with you. I don't think you'd have to be a scientist—or a member of Parliament, for that matter, or a bureaucrat—to understand that Asian carp is a very bad species. So I go back to my question again. You don't have to spend any money on science to understand that if live Asian carp get out, we're in trouble. Of course, my frustration is that two years later we still do not have an answer as to why the government, especially with DFAIT and DFO, have not yet indicated how this should be banned.

I don't see the difficulty in it, and I'm hoping some of you can explain why it's so difficult to give us that answer. If you can't, can you tell us who can give us that answer?

**The Chair:** Mr. Stoffer, to be fair, we've scheduled some people on this very issue on Thursday. We've asked for someone from DFO. Monsieur Labonté has said there will be somebody here from DFO to address this issue. There's supposed to be someone here from International Trade as well, who will also make a presentation to us. One would hope that they will get a heads-up as to your questions, because those are precisely the answers we want to hear: why, specifically, live Asian carp have not been banned.

• (1210)

**Mr. Peter Stoffer:** Mr. Chairman, correct me if I'm wrong, but isn't Mr. Paul Martin a technical barriers and regulations director?

**The Chair:** I don't know.

Mr. Martin, is that your title?

**Mr. Paul Martin:** Yes, it is.

**The Chair:** Do you deal with Asian carp issues?

**Mr. Paul Martin:** I deal with technical barriers to trade, which includes measures by Canada or by other countries to control imports on technical grounds, sanitary and phytosanitary grounds, which would be the case when you're dealing with invasive species.

**The Chair:** Okay. Are you familiar specifically with the Asian carp file?

**Mr. Paul Martin:** I have read briefing notes about the Asian carp file and the questions that were raised at this committee.

**The Chair:** Can you help us in any way?

**Mr. Paul Martin:** As to the specific question you asked about the status of the regulations that would be put in place by DFO, I'm not sure. I'm going to listen with interest on Thursday.

With respect to why it's necessary to do a risk assessment to ensure that measures taken are in fact scientifically justified, that is certainly advice that we provide to all regulatory departments.

**The Chair:** That's fair. A risk assessment was done. It's clear that it's a very dangerous animal from an invasive species point of view. Is there any technical impediment, from your perspective, to banning the importation of live Asian carp?

**Mr. Paul Martin:** No, I don't know of any impediment from the perspective of international trade rules.

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

Dr. Watson-Wright.

**Dr. Wendy Watson-Wright:** To speak to not needing to spend science dollars on determining that the carp are a threat, in fact we did have to spend science dollars on that, and now we have I think a very defensible risk assessment for these four species, similar to what Mr. Martin has just said. So not to be disrespectful, but we did need to spend science resources to do just that.

**The Chair:** And I've asked for a copy of that risk assessment for the committee, Mr. Stoffer.

Just before we go to Mr. Murphy, in 2003 when we issued our report, the cost of the sea lamprey control program was \$21 million. We recommended in recommendation number 9 that we contribute our full 31%. So I just wanted to ask, following along Mr. Stoffer's line of questioning—because you're talking about \$8.1 million, which is great and everybody is happy that there was more money, but we have to put it in context—what is the current annual cost of the program, and what is \$8.1 million as a percentage of that current cost?

**Dr. Wendy Watson-Wright:** I can't give you that exactly. I haven't seen the current budget figures. This is not an international obligation; it's a memorandum of agreement between Canada and the U.S. I would say it's probably very close.

What happens is that the U.S. goes up and down. So some years it is more than 31%, some years it is less than 31%. I would expect, although I can't verify it at this moment, that we're above 31%. But again, as I think it's been explained previously, there's the contribution, but then there's what is done. So in some years more might be done on the American side, and will in fact be done by Canadian researchers. So I think it's working quite well, and I think this new infusion of funds will certainly help.

**The Chair:** Good. I just want you to get me the answer, if you possibly can. What is the current annual cost and what percentage of that is \$8.1 million? There has to be some average annual cost. I understand there are fluctuations from year to year, but we came up with \$21 million annually in our report. We must have dug that figure up from somewhere.

**Dr. Wendy Watson-Wright:** You'd like the current budget?

**The Chair:** No, the current cost of the program and what percentage of that current cost in Canadian dollars is \$8.1 million, which is what we're now going to be contributing to the sea lamprey program on an annual basis for five years, according to your evidence.

Mr. Murphy.

**Hon. Shawn Murphy (Charlottetown, Lib.):** Thank you very much, Mr. Chair.

I assume this problem we have in Canada is being experienced by countries around the world. I assume it's an international problem, and I know there was an international convention signed for this country about 13 years ago.

I'm not sure exactly who to ask the question to, but can someone give us a summary of what strategies are being used by other countries—the United States, Europe, Asia, perhaps some of the South American countries, coastal countries—that definitely have similar problems, that species come in and destroy their own commercial species overnight or over a period of time? Is there

legislation on the books that is tougher than what Canada has now? I guess we don't really have much in the way of legislation. Give us a summary of what's going on in other countries.

• (1215)

**Dr. Wendy Watson-Wright:** I'll take a stab to begin with, Mr. Murphy.

Certainly in the U.S. there is a National Invasive Species Act. I can't give you any details about that, but we can certainly get those. I think pretty well all countries are struggling with this whole problem, and in particular on the aquatic invasive species side.

The ballast water issue is being dealt with internationally, as alluded to by my colleague, and Mr. McDonald may wish to speak to the ballast water side of it, but I think we're all pretty well in the same boat—not to be funny, but we are all struggling with the same issues on the science side, for certain. We are interacting with our international colleagues on the issue, trying to learn as much as we can from others.

There is an annual international conference on invasive species. Until last year it was held in North America. Last year it was held in Ireland. So yes, we are all struggling with it. We could probably find a literature review on that or provide a summary to you on what we do know at this point.

I don't know, Serge, if you want to speak to that.

**Mr. Serge Labonté:** At least from the Canada-U.S. perspective, we have been working with the U.S. For instance, we have met twice with the U.S. Fish and Wildlife Service in the last few months to look at that particular file in a joint manner. We are looking at how we can collaborate in risk assessment, in scientific activity. We are learning about early detection, rapid response, what they do, and how we could work together on some other things. It goes to communication, outreach education, and so on. We will meet again in the next few months.

We are trying to build that momentum with our U.S. colleagues to build capacity in dealing with those things, not only from a science perspective but also from a risk assessment perspective. Through the CEC in particular there are some initiatives in risk assessment that are being looked at. That includes Canada, the U.S., and Mexico. So we're trying to leverage each other in dealing with specific issues.

As Wendy mentioned, one of the biggest issues is in relation to ballast water. It's complex. A convention was signed a year ago, but the implementation of the convention requires the signature of many parties. Gerard might want to elaborate a little on how the convention will take effect and on how many people are needed.

**Mr. Gerard McDonald:** For ballast water specifically, we work mainly through the International Maritime Organization, which is the UN body responsible for international shipping regulation. We work through that body, which has representatives from 163 countries sitting on the assembly.

As I mentioned earlier, in 2004 they adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments. That convention will come into effect when it's acceded to by 30 states, with 35% of the world's merchant shipping, by tonnage, acceding to it. So Canada will be acceding to it, as will other countries, and as soon as that number comes into effect—

• (1220)

**Hon. Shawn Murphy:** Has Canada acceded to it yet?

**Mr. Gerard McDonald:** No, it hasn't.

**Hon. Shawn Murphy:** When do you plan to do that?

**Mr. Gerard McDonald:** We would plan to do that when our new Canada shipping act comes into force, which will be in 2006. Obviously, we'll have to consult on the entry into force of that regulation, and then there is a process that we have to follow with any international convention before it's officially acceded to by the government.

**Hon. Shawn Murphy:** Okay. There seems to be a sentiment in the committee, and I'll go back to the previous report that these regulations should be in effect, that the international agreements should be.... Do I take it that the push-back is from the shipping industry itself?

**Mr. Gerard McDonald:** There is some push-back from the shipping industry. The shipping industry wants to make sure they fully understand the regulations and can apply them appropriately whenever they do come into force.

**Hon. Shawn Murphy:** So if a ship comes into the port of Halifax or Montreal right now, are there any regulations or any protocols dealing with ballast water now?

**Mr. Gerard McDonald:** Yes, there are guidelines.

**Hon. Shawn Murphy:** But they're not mandatory.

**Mr. Gerard McDonald:** They're not mandatory, that's correct.

**Hon. Shawn Murphy:** And from your experience, are they being followed?

**Mr. Gerard McDonald:** Maybe Mr. Morris can provide us with more technical detail.

**Mr. Tom Morris:** Yes, we have found good compliance with the guidelines. Now, they are based on the ship's reporting, if they were able to comply with them or not. In the case of non-compliance, we do try to follow up with the ship. We go on board and find out why they couldn't comply, but the reported compliance from the ships is quite encouraging.

**Hon. Shawn Murphy:** Perhaps I'm wrong on this. Is there not a situation where an invasive species can also attach themselves to the exterior of vessels, both commercial and recreational?

I know in the province where I live we have the clubbed tunicate, we have some oyster issues there, and there has been some allegation that they come from the exterior of the boat. Does the government have any plan that would require some kind of disinfectant, I would

assume, once they leave their port of origin? Is that on the radar screen here at all in these discussions?

**Mr. Gerard McDonald:** Yes, that largely involves the use of anti-fouling paint, and I'll let Tom provide some more technical detail there.

**Mr. Tom Morris:** Again, a lot of the ships use anti-fouling paints to allow them to operate more efficiently instead of having these things stuck to the outside of the hull, which slows them down and then they have to use more fuel. So anti-fouling paints are used, and that's been quite effective in reducing introductions. I guess it's one of the great unknowns when it comes to the ship as a vector.

At the conference in Ireland that was discussed earlier, one of the scientists got up there and estimated that probably 60% of the introduction from ships was coming from hull fouling, when all along everybody thought it was ballast water. There are a lot of discussions going on now, but if something is stuck to the outside of the hull and the ship comes into your port, there is nothing anyone has identified other than the use of anti-fouling paints that can be done, once they get there, to try to prevent introduction.

With the ballast, yes, you can do exchange at sea, and in future there will be treatment. But as I said, no one has really identified any procedure or regulation you could bring in to stop an organism from attaching itself to the outside of the hull.

**The Chair:** Thank you, Mr. Murphy.

Mr. McLean wanted to address a question you raised.

**Mr. Robert McLean:** I wanted to provide a bit of additional information.

There are two ways to think about what's happening internationally. I think one is through looking at international institutions and the other is by looking at the very question you were asking, about what other countries are doing. Perhaps we'll look at the international institutions first.

The international agreement that you were referring to is the Convention on Biological Diversity, and I think that has really been a place where countries have come together to think about what needs to be done on invasive alien species. There is an upcoming international workshop in New Zealand to look at the gaps in the international frameworks and the institutions in addressing invasive alien species.

One existing organization is the International Maritime Organization that my colleagues from Transport Canada have talked about already.

A second one on the plant side is the International Plant Protection Convention. There is a North American coordinating body for that, and they very deliberately in the last couple of years have begun to look at the issue of plants and plant pests in terms of the harm they do to environments and ecosystems, rather than simply having the traditional focus on agriculture and the forest sectors.

The third one is the OIE, the animal health organization, because of course we do have some diseases such as West Nile virus that in fact are carried by invasive species.

Beyond those three main mechanisms, I think it's probably fair to say that arguably there are gaps in the international regime. It's through the Convention on Biological Diversity that we will begin to think about, internationally, how to close those gaps.

In terms of what countries are doing, many people would say that New Zealand probably has the most—I'll call it—aggressive program on invasive alien species. Invasive alien species are particularly problematic for island states, especially small island states. These species, along with habitat, are probably the main reason those countries lose biodiversity, and in fact lose their cultures. So New Zealand has been fairly aggressive in terms of what they do, for example, with plants and plant pests.

In Australia there is a somewhat similar situation. We know about the rabbits in Australia. The Australians have paid a fair bit of attention to invasive alien species and have a strategy.

In the United States, there was a presidential order about five years ago that really brought federal departments together to take action.

We have seen a number of countries like Canada very recently—within the last 12 months—develop their invasive alien species plans. Other countries include Japan, the European Union, and the Republic of South Africa, which had to develop a weed strategy to deal with the weeds that get into their river systems and take up all the water the country needs.

I just thought I'd give you a really quick overview of what's happening in some of the other countries.

• (1225)

**The Chair:** Thank you.

Dr. Watson-Wright, Mr. Morris mentioned a scientist who speculated on alien invasive species on the outside of ships. This would clearly indicate that we have species that are able to survive in both fresh and salt water. The theory would presumably be that they live in fresh water, then they latch on and they come all the way across the ocean in salt water, and they're still alive when they come to the St. Lawrence Seaway. Or, vice versa, they always lived in the ocean, let's say, and yet they are able to survive and detach in the fresh waters. Is this what this scientist is saying? Do you know anything about this paper that was mentioned?

**Dr. Wendy Watson-Wright:** I don't know this particular paper. Certainly there is evidence that saltwater animals can live in fresh water. The sea lamprey is a good example. But I'd have to see the paper to be able to offer you a good comment on that.

**The Chair:** Because that indeed would kind of set the situation on its ear, since 80% is now the estimate of aquatic invasive species that are coming in with ballast water.

**Dr. Wendy Watson-Wright:** I suspect—I suspect, but I don't know it yet—that he was speaking more about saltwater to saltwater.

**Hon. Shawn Murphy:** That's what I was speaking of, saltwater to saltwater.

**Dr. Wendy Watson-Wright:** I would suspect that. Again, I don't like to quantify it, but I would say, by and large, you would not expect saltwater species to be able to survive in freshwater, and vice versa. But I would like to see the paper.

Did you want to add something, Serge?

**Mr. Serge Labonté:** One of the key elements in the action plan is on the movement or the introduction of invasive species through recreational and commercial boating. There are a lot of examples, particularly in fresh water, where an invasive species is moved from lake to lake to lake because of boats. Those particular invasives stick to the keel of the boat, or sometimes they are a part of the bait. That kind of thing is how they spread.

They do spread also in the marine environment by the same approach. If you think about the clubbed tunicate, that would be a way they propagate from bay to bay with the help of a boat operator or a fisherman. They stick to different boats, and they're introduced in different ways.

**The Chair:** But seawater-to-seawater propagation must have been going on since the first human put a boat in the water and sailed to another port.

**Mr. Serge Labonté:** That's very likely.

**The Chair:** It has to have been going on throughout out the entire human society, never mind a log that finds its way from one continent to another, which has to have little creatures harbouring on it.

**Mr. Serge Labonté:** It's very likely, and you see those species. For instance, I would guess that the green crab has basically been moving along the coast of the United States and getting into the Gulf of St. Lawrence in that kind of way.

But ballast water has the particular feature of bringing species from freshwater to saltwater and then back to freshwater. The ballast water exchange allows you to clean up the water, but there is the sludge in the tank, and there are always organisms that stick in the bottom there.

Ballast water exchange is not 100% efficient. If it's done properly, it reduces the risk, but it doesn't eliminate the risk. I think we need treatments for the ballast water, maybe boil and blend would be part of it, but it might require a bit more than that to get rid of some of those critters.

• (1230)

**The Chair:** All right. Thank you.

Mr. Kamp.

**Mr. Randy Kamp (Pitt Meadows—Maple Ridge—Mission, CPC):** Thank you, Mr. Chairman.

Thank you to all of you for coming.

I'm kind of new to this, new on this committee and fairly new to this issue, so let me just return to a somewhat bigger-picture view of things.



At the risk of simplifying things unnecessarily, I generally approach an apparent problem with a few questions. One is to ask what the problem is and for some sort of assessment of how serious it is; second, what measures are required to address the problem; and then third, what resources are necessary to implement those measures? That's part of the nature of government, it would seem to me.

But I'm not really getting a sense of how serious you think this problem is, potentially, and I'm just wondering if any of you would like to comment on that briefly.

**The Chair:** Mr. McLean.

**Mr. Robert McLean:** Thank you.

The strategy that was approved attempts to set out, or at least answer, some of the questions you've raised. If I were to refer to pages 10 and 11 very quickly, there are gaps in what I would characterize as thorough economic assessments of the costs to Canada of invasive alien species. The one study we're aware of in which published information is available was on just 16 species. The estimate, in terms of annual costs—and these are difficult to estimate. The minimum cost was \$13 billion, with a potential high of almost \$35 billion annually.

In more specific instances—for example, harmful plant pests to our agricultural crops and forestry—the cost was about \$7.5 billion annually, with one alien thistle species impacting the canola crop in western Canada, for a \$320 million annual cost in the prairies.

The cumulative impact of the zebra mussel ranges from \$3 billion to \$7.5 billion for the Great Lakes, and that's not just Canada, but Canada and the United States. Ontario Hydro's annual cost for zebra mussel control measures was initially \$20 million when it first became aware of the problem. The estimate now is that it costs about \$1 million annually to control zebra mussels in its intakes.

And of course we've been hearing about the incredible costs of even controlling the sea lampreys. This is not an inexpensive proposition for our country.

**The Chair:** Mr. McLean, I'm sorry. I just want to bring your attention to one paragraph in our 2003 report:

In Chapter 3, *Towards Biological Integrity: The Challenge of Alien Invasive Species*, of its 11th Biennial Report on Great Lakes Water Quality, the IJC highlighted the ecological damage and the economic costs of alien invasive species estimated, according to one study, to reach \$137 billion annually in the U. S. alone.

**Mr. Robert McLean:** If we also look at the cost to individuals—and I know this is not an aquatic example—the Canadian Food Inspection Agency is busy cutting down ash trees on people's property in southern Ontario. That devalues the property. It makes people very upset to lose those trees. There are some social issues along with the economic ones.

**Mr. Randy Kamp:** Thank you for that.

I'm convinced that it is a potentially serious problem. What I'm not quite as convinced of is whether you think it is, and what you plan to do about it. Dr. Watson-Wright said it's a high priority in the department and that's why they're working on this.

If I understand correctly, there's this strategic management framework put together, and this is for aquatic species, right? Based

on that, there was an implementation strategy, which I guess answers these other two questions.

I think you said that you hope to have this implementation strategy for approval by September 2005. Is that a realistic figure? We kept hearing that with the wild salmon policy for years. Is it going to turn out to be that way for this as well?

• (1235)

**Dr. Wendy Watson-Wright:** I would say yes. We will take it to ministers in September.

**Mr. Randy Kamp:** And then what will happen with it?

**Dr. Wendy Watson-Wright:** Then we will move forward on whatever they say. They may say to implement part or all of it.

Serge, you're more intimately involved with the plan.

**Mr. Serge Labonté:** What we've done, basically—and it was in the presentation—was to try to identify the four or five key priorities we should focus on.

We're going to present a plan that—if it was how much are we investing globally, all jurisdictions together. If we make an abstraction of the sea lamprey control, the province and the federal government in aquatic invasive species invest in the order of \$3 million to \$5 million a year right now. There are a couple of proposals. One is to double that amount. Another one is to triple that amount, of all jurisdictions together.

We're coming forward with specific actions that we would move forward, some of them for immediate action. Things in mind at this point in time are essentially around outreach and working with Canadians. It's absolutely critical that we bring all the people we can into that part of the process. We need eyes. We need people to support the network and provide information. It's a very high priority.

Another element we're looking at is a common approach to assessing the risk of the introduction of new species. It's basically in the range of dollar value we're discussing.

We expect provincial and federal ministers to provide us with some guidance on the way forward on those particular elements.

**The Chair:** Thank you, Mr. Kamp.

Mr. Stoffer.

**Mr. Peter Stoffer:** On the ballast exchange discussions that you've been having, Mr. McDonald, what role have the provinces played in all of this? As you know, Prince Edward Island, Quebec, Ontario, Nova Scotia, New Brunswick, Newfoundland and Labrador, and British Columbia, for example, would have great interest in regard to protection of their resources for their people as well. Have the provinces played a role in terms of advice or consultation in this regard? If so, what have they been saying to you?

**Mr. Gerard McDonald:** Maybe Tom would be more direct.

**Mr. Tom Morris:** Again, they would be involved in our Canadian Marine Advisory Council meetings that we mentioned earlier. Anyone who had an interest would show up and provide their input. There are working groups in all the regions, and they could have input there. As well, we've been discussing this through the Canadian Council of Fisheries and Aquaculture Ministers. Again, we haven't got a lot of input there, but we have been providing information to let them know of the programs—and ballast is an issue—and keeping them up to date on what our proposals are.

**Mr. Peter Stoffer:** With regard to the chairman's response as to this being now the spring of 2005, and we were hopeful something would have happened at the end of 2004—when, realistically, can we see a finalization of this? Realistically—

**Mr. Gerard McDonald:** Realistically, we're hoping that by the end of June we'll have a proposed regulation published in part I of the *Canada Gazette*.

**Mr. Peter Stoffer:** That is the end of June. From there it would obviously go to the ministers. Once you've gazetted it, doesn't it still go to the minister or a senior department...?

**Mr. Gerard McDonald:** It goes through ministers prior to going into the *Canada Gazette*, part I. It goes through Treasury Board ministers, and then there would be a certain amount of time for consultation. For this regulation, it would probably be 60 days. After that, it could then be put forth for publication in part II of the *Canada Gazette*, which in effect makes it law.

**Mr. Peter Stoffer:** I'm a bit confused as to the further consultation that is required, because you're already having consultations on this. I assume it's to get input from all the stakeholders, as you've indicated. Once you've received that and you've formulated your plan, what further consultation would be required?

**Mr. Gerard McDonald:** What happens is we've been consulting extensively on what should go in the regulation, what our policy is with respect to the regulation, and how we think it should take place. We gather all that information and then obviously have to work with the lawyers on the exact legal wording that has to be used under the act, and the regulation itself is legally drafted. That's when it's published in part I of the *Canada Gazette*. That allows everyone to then have a look at the regulation—the exact words in the regulation—and as part of the government's regulatory policy they are given one last chance to provide any comments they may have on the regulation itself.

• (1240)

**Mr. Peter Stoffer:** You've obviously worked with the United States very closely on this, I would assume, in order to either parallel or to match up and do the best you can, because of issues like the St. Lawrence, for example, or the Strait of Juan de Fuca.

**Mr. Gerard McDonald:** Yes, we have.

**Mr. Peter Stoffer:** What is their approach in all of this? Have they given you any indication as to the draft, and have they commented at all in that regard?

**Mr. Gerard McDonald:** Yes, we've been working very closely with the United States. In fact, tomorrow we have a meeting set up in Montreal to talk about joint inspections on ships with no ballast on board. We also have a meeting set up with the rear admiral

responsible for marine safety next week. Ballast water will be one of the issues discussed.

With respect to our respective regimes, we will very much be aligning our regime with that of the United States when the new regulations come into force. Obviously, we both work in concert with the international community to try to push those regulations along. We and the U.S.A. worked very hard to take a more aggressive stance than perhaps some other countries in the international community, and we remain in quite close consultation to foster that team approach.

**Mr. Peter Stoffer:** Correct me if I'm wrong, but is the U.S. legislating their Ballast Water Management Act, or is that more regulatory?

**Mr. Gerard McDonald:** In my understanding, it's regulatory, but, Tom, you may know.

**Mr. Tom Morris:** Yes, the U.S. Coast Guard amended their regulations in September of last year. Up to that point they had a regulation that required ballast exchange if you were going to the Great Lakes or the Hudson River. There was also mandatory reporting for ships coming to any other U.S. ports, but an exchange wasn't mandatory. You just had to report on what you did.

They found they weren't getting good response to the reporting, so they changed the regulations, as I said, last September, and there's now mandatory exchange and reporting for all ships coming to U.S. ports, which will basically be right in line with what we're proposing for our regulations.

**Mr. Peter Stoffer:** In other words, you are proposing that it would also be mandatory within Canada.

**Mr. Tom Morris:** Yes.

**Mr. Peter Stoffer:** I want to thank our researcher for that question, by the way.

Thank you.

**The Chair:** Thank you, Mr. Stoffer.

Colleagues, would you mind if I took a round?

Let's stay with ballast water for just one moment. I have a press release here dated January 18, 2005, from an American organization. It says that the United States Coast Guard admitted on January 7—I presume 2005—in the federal register, which I gather is the same as our *Canada Gazette*, that its ballast water program to protect the Great Lakes from invasive species omits at least 80% of ocean-going vessels that enter each season, and that the coast guard is now taking the first step to develop—the first step to develop—a program to address these unregulated vessels.

Do you know anything about this, Mr. Morris?

**Mr. Tom Morris:** Yes, I do. Of the vessels coming into the Great Lakes, 80% carry no ballast.

• (1245)

**The Chair:** So they say.

**Mr. Tom Morris:** Yes. The program they're looking at is for these "no ballast on board" vessels. There's a sediment there. When they come into the lakes, they may take on a bit of ballast in the Great Lakes and then—because they go to various ports—discharge it, and when they do that they stir up the sediment. Some of the scientists have concluded that is a significant vector for possible introductions. The U.S. have led a study over the last few years—and it has involved Canadian participation—looking at whether these vessels with no ballast on board are a risk. If so, what would need to be done? What would be a procedure they could follow such that the risk could be reduced?

They have decided they are a risk. We have included some stuff in our proposed regulation. The meeting Mr. McDonald talked about tomorrow in Montreal is to address these no BOB vessels, so that both Transport Canada and the U.S. Coast Guard can start sampling to make sure the water in these empty tanks—the bit of residual ballast—isn't fresh. In other words, as long as it's salt water, the scientists say that reduces the risk, the same as the ballast exchange does. As well, they have scheduled a meeting, I believe for May 9, in Cleveland. The U.S. Coast Guard is organizing that. They plan there to have a public discussion on what their strategy should be to deal with these 80% of the vessels.

**The Chair:** Thank you.

On the ballast regulations, you were saying, if I understand the evidence correctly, Mr. McDonald, that they will be published in the *Canada Gazette*, more or less in June of this year.

**Mr. Gerard McDonald:** That's our hope, yes.

**The Chair:** That's your hope. We've heard hope before, but let's hope "hope" is reality.

That's June. Then there would be a 60-day consultation period, in theory, which will likely turn out to be much longer. Will there be a regulatory impact statement along with the—

**Mr. Gerard McDonald:** Most certainly, with the publication. In part I there would be a regulatory impact analysis.

**The Chair:** All right.

Were those regulations that are going to be published drafted under the Canada Shipping Act or the new Canada shipping act?

**Mr. Gerard McDonald:** They're under the existing Canada Shipping Act, so they would take effect immediately.

**The Chair:** Will they be able to be converted to the new Canada shipping act without problem, or will there be some difficulty?

**Mr. Gerard McDonald:** Yes, they will be transferable to the new shipping act.

**The Chair:** All right. Good. Thank you.

Now, we were talking about the American legislation. Our briefing notes indicate that American legislation lapsed in 2002, not for any particular lack of will, but because of changes in Congress and everything else. There doesn't appear to be any invasive species act that is currently in existence in the United States. I'm curious how, from a U.S. point of view—I know you aren't experts on the United States—they're doing these things if there's no act under which to do them.

In any event, given that there's a lapse in the legislation, have we in Canada noticed any difficulty in dealing with the Americans, or have they confided to you that there are difficulties that need to be fixed by an act of Congress?

Are there any comments on that?

Mr. McLean.

**Mr. Robert McLean:** Thank you for bringing that to my attention. I wasn't aware that U.S. legislation had lapsed. We'll try to get an answer to that question for you for Thursday. We are in direct contact with the National Invasive Species Council secretariat in the United States, so I think we can have an answer for you in 48 hours.

If in fact the legislation has lapsed, I'd be surprised that there would be significant regulatory gaps. We aren't experiencing any problems with respect to the work we do with the United States on invasives, at least not to my knowledge.

**The Chair:** Okay, my five minutes is up.

Mr. Kamp.

**Mr. Randy Kamp:** First of all, for your information, apparently the new Pope is Cardinal Ratzinger from Germany.

• (1250)

**The Chair:** Are you joking or is this a news flash?

**Mr. Randy Kamp:** That's what my staff has told me.

**The Chair:** Well, that's interesting.

**Mr. Randy Kamp:** Yes, that was quick.

Just a quick follow-up, and it's been partly answered, I think. We now have this implementation strategy, which by the end of the year perhaps will be on the minister's desk and eventually it's going to be implemented. According to your presentation, Dr. Watson-Wright, it has things like governance. At the very end of that you say it has this aquatic invasive species action program, which I assume means that somebody at some point will actually do something. We'll get past all the paper and somebody out there will actually be addressing this problem.

Until we get to that point—and when that is, I don't know, 2006 maybe—when somebody will be doing something according to this, what's being done in the meantime? If this is a serious problem, and apparently it is, and it's a high priority and so on, are we completely vulnerable until we do this stuff, or are there other measures that are being put in place ad hoc? I guess that's my question.

**Dr. Wendy Watson-Wright:** I tried to indicate some of the progress that's been made and what's been done so far.

**Mr. Randy Kamp:** Actual stuff?

**Dr. Wendy Watson-Wright:** Actual stuff, yes, like risk assessment and things like that.

**Mr. Randy Kamp:** But risk assessment is not keeping the invasive—

**Dr. Wendy Watson-Wright:** It's absolutely necessary before we can go ahead.

**Mr. Randy Kamp:** I know it's necessary, but is it keeping the alien species out of our waters, for example?

**Dr. Wendy Watson-Wright:** The risk assessment will assist us in that.

I will speak to the science side. I will ask Mr. Labonté to speak more to the details of the action strategy.

In fact, the network that we've set up through the University of Windsor with participating universities across Canada is a significant step forward. We are engaging university researchers, which also engages outside funding, outside meaning NSERC, but also any funding they may have. I think that helps us engage throughout the world because the scientists are interacting, as they usually do, internationally. That's going to help us a lot, and I think that's a very significant step.

In terms of what we're doing, it will end up not only on our minister's desk; it will be on all the ministers' desks across the country, all of the provinces and territories as well. That's also significant.

Serge, maybe you could speak more to the actual program.

**Mr. Serge Labonté:** The CCFM task group, which is now two years old, has been very useful in terms of connecting the various jurisdictions, trying to get their act together, and setting the tone to deal with this. On the action plan, or the implementation plan, as we speak we are doing work on this. The provinces are quite involved in dealing with this. In Prince Edward Island, for example, I think the province is investing a huge amount of energy in trying to help develop a solution to deal with the issue of invaders like clubbed tunicate, which have a direct impact on the mussel industry.

Yes, from a research perspective we're trying to move forward. We will need to implement a monitoring program and devise a strategy, but we cannot do that alone so we're going to bring the stakeholders into the picture. Obviously, the funding that was provided by the government in the 2005 budget will help us make improvements in key areas. There is a need not only from a monitoring perspective, but there is also a need in science. There is a need in risk assessment. There is a need in educating the public and bringing the public on board in helping to steward the whole issue. Those things are happening as we speak. There is a need to really increase that capability. I would say overall that people are more aware of the issue and the need to work on that than they were a few years ago.

**Mr. Randy Kamp:** I don't know that I've heard what's actually being done. I understand the need for science. I'm a big believer in that, and research and so on, to go beyond. But if this is right now, and was 10 years ago and before that, a serious, potentially costly, and dangerous problem that could affect our economy and our culture and so on, I'd like to think that somebody is not just planning and investigating and researching, but right now is actually trying to make sure these invasive species are not taking shape in our waters and in our land as well.

I haven't really heard anything that tells me what's being done. You're talking about implementing a monitoring program. Is no monitoring being done now? Do we just hope it's okay until we implement this?

**Mr. Robert McLean:** I have a more general response than simply aquatic invasive species. Back to the importance of the risk assessment—without that kind of baseline science it's really hard

to know the appropriate thing to do with regulations. In fact, if you don't develop the science and the rationale to make the regulations, we're probably not going to be successful as government departments in working on behalf of our ministers to make those regulations. The science tells us about priorities from a programmatic perspective and where we should focus.

Probably what our limited resources—and I do not wish that to sound like a bureaucrat with a resource whine. The risk assessment is needed to help us figure out how to do the control measures. If we don't have the right science, it's hard to know what those control measures should be. I think, importantly, the risk assessment also helps us with some targeted and meaningful communications.

If we look at where Canada is now, we're really in transition. We've worked for decades on plant pests as they affect the agriculture and the forest sectors. Where we've been historically... there is a lot happening. We are in transition to a fuller and more comprehensive program. We are doing what we can with the resources we have.

Ms. Watson-Wright spoke already about the reallocation within her department to attempt to address aquatic invasive alien species. The resources in the budget are critical to the departments that are in line for that funding, to take us another step into what, arguably, are new areas. We're not completely silent in the area of aquatic invasive species, but it's very clear that even a \$2 million per year investment into DFO is a doubling of their capacity, and that's critical.

The last comment I would make is the magnitude of the challenge: the pace of international trade, the volume of international trade, and the increased diversity of the kinds of things we see in trade, plus the countries of origin, have increased the challenge to all of the involved departments by probably orders of magnitude. We've seen—in my career, almost 30 years now—for the last three to four summers, far more attention to invasive alien species. That's because we have more, and one of the reasons we have more is our climate is changing and we continue to have habitat disturbance and destruction, which are two causal factors as to why we have invasive alien species.

I don't want to leave the impression with the committee that we're just planning. There is a lot happening. To take the step that Canadians want us to take is going to take something more.

My last comment would be that the planning is important. I think for the first time we're more organized than we've ever been as a country in terms of what needs doing. That, in and of itself, helps us align the current resources to the highest priorities.

• (1255)

**The Chair:** Thank you.

Mr. Kamp, welcome to the committee on this issue.

This is exactly what we've been hearing and exactly what the commissioner of the environment complained to us about, that there was, it seemed, a decade of consultation and nothing else. To be fair to the people here, I believe there has been movement, clearly—obviously not as fast as we'd like to see it, but there has been movement.

The reason we're having these hearings is because we decided as a committee that we wouldn't let our 2003 report die, but we would try to keep the public informed. Last year these hearings were televised. We tried to get the television rooms this time, but they were booked by ministers appearing before committees. Otherwise these meetings would have been televised as well—along the lines of what Mr. Blais was saying, in order to try to inform the broader Canadian public rather than stakeholders only.

We hear exactly what you're saying, and we're all of the same view.

We're almost through. One question, Mr. Stoffer, because you'll have a chance on Thursday as well.

**Mr. Peter Stoffer:** Are you aware of any other countries that we deal with on a regular basis on these issues—and I don't need the answer now—that have banned live Asian carp into their markets?

There is an organization in Ontario that is willing to do a lot of the work on the ground or in the water, as Mr. Kamp had indicated, and that's the Ontario Federation of Anglers and Hunters. One of our recommendations was that it should receive some funding to do that work on the ground, to educate the Canadian people, especially in the area of the dangers of invasive species, zebra mussels, etc. From what we understand, it didn't receive the funding it had requested. I would ask you once again, if you're speaking to your individuals, if indeed the Ontario Federation of Anglers and Hunters' request for funding could be looked at, so it can do the work that Mr. Kamp had indicated could be done.

That's just a comment. Thank you.

• (1300)

**The Chair:** Mr. McLean, we did ask that this be through Environment Canada. You're here from Environment Canada. Relatively speaking, it was a puny \$1.4 million. Any movement on that?

**Mr. Robert McLean:** The budget provides \$5 million over five years to Environment Canada. I mentioned earlier that we think the highest priority for us is public awareness. On \$1 million a year we can't obviously fully fund the Ontario Federation of Anglers and Hunters' request.

I did meet with the organization a couple of weeks ago and suggested a couple of things. Not surprisingly, there are a number of organizations knocking on our door wishing to do something on public awareness, including, for example, the International Joint

Commission, which identified five areas within which it would want to work. One of those areas is public awareness.

We need to figure out, and I mentioned this to the OFAH already, the partnership of organizations, government and non-government, that would come together to build—I don't know what the right word is—a coordinated integrated public awareness program, so we can take advantage of the strengths and capacities that each of us have. OFAH is very supportive of that.

What we need to do, as an organization, is make sure that organizations receiving the funding can work nationally and can work in more than just two languages. I think it's going to be very important that we speak to some of the new groups we have in Canada, for example, anglers and those into recreational boating. We need to think in more than just English and French, a couple of areas within which I know the OFAH is giving some further consideration. I've seen its proposal, and it's very clear that we can't fund it all, but at the other end of the equation, they wouldn't be shut out.

I just can't give you a number until we see a broader program that will reach out to all Canadians.

**Mr. Peter Stoffer:** When will that be concluded, do you think?

**Mr. Robert McLean:** We're trying as fast as we can. My folks are writing that draft plan now. I would think some time before the end of this calendar year, much before the end of this calendar year.

**The Chair:** Thank you very much, Mr. Stoffer.

Ladies and gentlemen, thank you very much for coming.

Just a heads up for Thursday, Mr. Morris. We're looking forward to your presentation. You've heard the kinds of questions that have been asked, and maybe as you're reviewing your notes you might want to incorporate some answers or comments based on what came out.

For everybody, there is no question that the committee will want an answer, and a very specific legal answer, to the question, why hasn't the importation of live Asian carp been banned since our report of 2003, under WPTI, or whatever the heck that act is, or any other act? Why has it not been banned? If there is some reason, we want to hear about it, and not in consultation terms, but in technical terms, such as it's contrary to the free trade agreement, or it's contrary to WTO, or whatever, with some chapter and verse to it. We've heard that there was perhaps some potential for retaliation by the United States because the vast majority of these Asian carp come from the United States. If that's the worry, what retaliation? On what basis is somebody concluding there might be retaliation, etc.? Let's get some very specific answers to those questions from the people who are going to come to address the trade issues and the carp issues on Thursday.

Thanks again for coming. We appreciate it.

The meeting is adjourned.





**Published under the authority of the Speaker of the House of Commons**

**Publié en conformité de l'autorité du Président de la Chambre des communes**

**Also available on the Parliamentary Internet Parlementaire at the following address:  
Aussi disponible sur le réseau électronique « Parliamentary Internet Parlementaire » à l'adresse suivante :  
<http://www.parl.gc.ca>**

---

**The Speaker of the House hereby grants permission to reproduce this document, in whole or in part, for use in schools and for other purposes such as private study, research, criticism, review or newspaper summary. Any commercial or other use or reproduction of this publication requires the express prior written authorization of the Speaker of the House of Commons.**

**Le Président de la Chambre des communes accorde, par la présente, l'autorisation de reproduire la totalité ou une partie de ce document à des fins éducatives et à des fins d'étude privée, de recherche, de critique, de compte rendu ou en vue d'en préparer un résumé de journal. Toute reproduction de ce document à des fins commerciales ou autres nécessite l'obtention au préalable d'une autorisation écrite du Président.**