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Chair

Mr. Scott Simms

Standing Committee on Fisheries and Oceans

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● (0845)

[English]

The Vice-Chair (Mr. Robert Sopuck (Dauphin—Swan River—Neepawa, CPC)): Welcome to meeting number 57 of the Standing Committee on Fisheries and Oceans as we continue our study of marine protected areas.

We have four witnesses today. We'll have one round with two of them, then we'll suspend for a few minutes and then go to our other two.

With us for the first round we have Dr. Dan Laffoley, marine vicechair, World Commission on Protected Areas, who is with the International Union for Conservation of Nature; and Dr. Daniel Pauly, principal investigator for Sea Around Us at the University of British Columbia.

Welcome to our witnesses. You will each be allowed 10 minutes to speak. I will try to keep to that schedule, because we always have a lot to cover and it's very important that we maintain the flow of the meeting so we can cover as much ground as possible. After your testimony there will be questions from the committee.

Without further ado, since I see Dr. Laffoley's name on top, we'll ask him to start for 10 minutes.

Mr. Dan Laffoley (Marine Vice-Chair, World Commission on Protected Areas, International Union for Conservation of Nature): Thank you very much indeed, Mr. Chairman, and good morning, everybody. It's a real pleasure to join you via video link from the U.K. I would like to thank the committee for the invitation and time to provide evidence today.

As has just been said, my name is Dan Laffoley. I'm marine vice-chair at IUCN's World Commission on Protected Areas. Just to offer a few words about IUCN and the World Commission, IUCN, the International Union for Conservation of Nature, is the world's largest and most diverse environmental network, composed of both governments and civil society organizations. We have about 1,300 member organizations, including many governments—Canada is a member—and we have input from some 16,000 leading scientific experts.

The Vice-Chair (Mr. Robert Sopuck): Dr. Laffoley, we're having some technical difficulties at this end. Could you just hold for a minute? Our interpreters are unable to hear you. We've stopped the clock, so you're not going to lose any time. In this business, every second counts.

[Technical difficulty—Editor]

The Vice-Chair (Mr. Robert Sopuck): I've just been informed that the sound is quite low. The translator will do her very best, but if it doesn't work out, she'll have to stop the translation service.

I assume that we have unanimous consent to continue.

Some hon. members: Agreed.

The Vice-Chair (Mr. Robert Sopuck): We'll start the clock.

Would you continue your presentation, Dr. Laffoley.

(0850)

Mr. Dan Laffoley: Thank you, Mr. Chairman.

I was just explaining the nature of the IUCN in the global conservation network.

The World Commission on Protected Areas is the premier global network of protected area professionals, creating and providing leadership and guidance on protected areas.

I lead on marine protected area or MPA issues at the commission and I am providing evidence today on MPAs on behalf of the commission. I've been in a leadership role on MPAs for more than 30 years in the U.K., Europe, and globally.

I think it's worth my starting my evidence by talking about what a marine protected area is. At IUCN we have defined a marine protected area. It is a clearly defined geographical space recognized, dedicated, and managed through legal or other effective means to achieve the long-term conservation of nature, with associated ecosystem services and cultural values. This is equivalent to the definition being used by the Convention on Biological Diversity. The IUCN definition is globally recognized and agreed to.

I want to emphasize that the definition of a protected area is the same on land as it is in the sea, and the conservation expectations are the same. Put simply, a marine protected area is an area of sea especially dedicated to the protection and maintenance of biodiversity and of natural and associated cultural resources, managed through legal and other effective means.

Marine protected areas come in a variety of shapes and sizes, and at IUCN, in our guidance we recognize five types, ranging from areas that are strictly protected through to areas that have multiple use and are based on the principles of sustainable use.

In terms of governance—the ways in which protected areas are managed—we recognize four types. They can be managed by governments, by indigenous or local communities, privately, or with mixed governance.

The commonality for all types of protected areas is that they're managed with the long-term conservation of nature at its heart, and where there is a conflict, nature is always the first priority.

What are the benefits of marine protected areas? The benefits are: the conservation of biodiversity and ecosystems; helping reverse global and local declines in fish populations and productivity by protecting critical breeding, nursery, and feeding habitats; raising the profile of an area for marine tourism and broadening local economic options; providing opportunities for education, training, heritage, and culture; and providing broad benefits as sites for reference concerning the status of the marine environment.

For conservation alone there are many things marine protected areas do, from maintaining and restoring the structure of ecosystems and their functionality; protecting and maintaining the abundance of key species in communities; protecting habitats from physical damage from fishing; maintaining genetic integrity, ecological functions, and resilience; to acting as an insurance to mitigate any detrimental effects, especially in adjacent areas.

In short, marine protected areas are a key, proven tool for the conservation of nature. They can act as reference ecosystems so that we understand the impact of activities, and they can form part of fisheries management to protect key sites and spawning areas. If we want to know the true potential of the marine environment and how impacted areas compare with what we might call "natural", then marine protected areas lie at the core of that approach.

We need marine protected areas because current management systems are failing; they're failing to maintain productivity, biological biodiversity, and ecosystems. Global fish catches have been in consistent decline, and marine protected areas are recognized globally as one of the only tools that can help to protect important habitats and representative samples of marine life and to assist in restoring the productivity of oceans.

● (0855)

In terms of progress with marine protected areas, Canada along with most other countries made a clear commitment to meeting international targets for the environment back in 2010. This was under the Convention on Biological Diversity. One of those targets is specifically about marine protected areas. It's called target 11. It says that by 2020 at least 10% of coastal and marine areas, especially areas important for biodiversity and ecosystem services, are to be conserved using protected areas and other effective area-based measures.

When we look at how well countries have done in protecting the environment in this way, around 5.3% of the global ocean is protected. If you look at the jurisdictional area of countries, it rises to 13.2%, and probably by the end of the year about 21 million square

kilometres will be under marine protected areas and, for the first time, the area of ocean protected will be larger than the area of land protected.

There are 21 countries that have protected more than 100,000 square kilometres. These include the U.S.A., Australia, New Zealand, Mexico, South Africa, Chile, and Indonesia. In this respect it is fantastic to see the renewed commitment of Canada to meet the 10% MPA goal by 2020. Canada currently has protected 50,000 square kilometres in MPAs and ranks at the moment 33rd in the world in terms of area.

In terms of how MPAs relate to fisheries, I've just talked about the target under the Convention on Biological Diversity for MPAs, but there are another 19 targets of equal importance, and there is one target that particularly relates to fisheries, which is target 6. This is the target that countries have signed on to so as to ensure that species are managed and harvested sustainably and that fisheries have no adverse impact on threatened species and vulnerable ecosystems.

There is a very clear international framework in place, and there is clearly a crossover between very strong, comprehensive fisheries measures under target 6 and the protected area measures that are under target 11 of the convention. The problem is that target 11, which is the marine protected area target, is very well reported on and focused on, while target 6 on fisheries is not so well reported.

We have a good body of evidence on the way we make marine protected areas successful. Strictly protected and fully protected marine protected areas have been shown in hundreds of papers in the scientific literature to increase the abundance, biomass, and diversity of fish invertebrate populations. We also know that the benefits accrued relate to a series of different factors and that full protection, alongside good enforcement and management, older marine protected areas, and larger and isolated ones, give the greatest benefits.

So-

The Vice-Chair (Mr. Robert Sopuck): Your time is almost up, Dr. Laffoley.

Mr. Dan Laffoley: Yes, I'm just about to conclude.

I think the final point I would make is that we need to view MPAs and fisheries management in the context of ocean change and the significant challenges now upon us from ocean warming, acidification, and deoxygenation.

My final three points are that MPAs have many socio-economic benefits and are critical in sustaining fisheries. Other countries have demonstrated that MPAs, when correctly managed, can provide those benefits, and Canada through its commitment has a great opportunity to show the world how it can achieve these things by 2020.

Thank you very much.

The Vice-Chair (Mr. Robert Sopuck): You're right on time. What we find, Dr. Laffoley, is that if there are any further points you would like to bring out, you'll be able to do so during the question and answer period.

Dr. Pauly is next, for 10 minutes.

Mr. Daniel Pauly (Principal Investigator, Sea Around Us, University of British Columbia, As an Individual): Good morning.

What I would present is the illustrated version of the same thing.

The first thing I would like to show is that the world catch is declining. It's declining, as you see in my first graph—you can also see it in French—because we fish too much. It is especially declining when you take account of everything that is not in official statistics.

The reported catch is the catch officially reported by agencies such as the DFO to the FAO. The actual catch of the world is higher, because lots of things are not counted by official agencies: the discarded fish, the fish taken by aboriginal communities—for example, in Canada that is not reported to the FAO—and lots of illegal catch that is made, which an agency such as FAO or DFO could not acknowledge exists. As a university, we can take account of it. The real catch of the world is much higher—about 50% higher—and is declining.

Why is it declining? It's because we fish too much. There are different ways you can say that, but the cumulative power of engines in the world's fleet is increasing at a rate that we can qualify as crazy. You can see it. It's particularly the case in Asia; subsidized fleets are increasing very rapidly.

The result of this is that the footprint of fisheries, which was already substantial in the fifties when the effects of the war were beginning to be repaired, has enormously increased. Compare the slide showing what happened in the fifties with the slide showing what happens now. The footprint of fisheries is immense. It's worldwide.

Why? What has happened? What has happened is that fisheries have expanded. Fisheries always expand; they cannot stay in place. Why can't they stay in place? It's because they are too powerful for the natural productivity of the resource. They have to expand because they essentially deplete what they have.

Canada's fleet offers a good example of this. I was a student in Germany at the time and came with a German research vessel, a converted factory vessel that was fishing between 500 metres and one kilometre deep. Canada had 500 years to maintain a successful fishery to about a 100-metre depth when fishing for fish cod in the Atlantic provinces. The trawlers that I was in and that were operating in the seventies went to one and a half kilometres of depth to dig the fish out.

The depth was a refuge; it was a marine protected area at the time. The fish were protected by distance, they were protected by the cold, they were protected by ice. The fish were protected from us by nature itself. Progress in fisheries is, then, overcoming these protections.

The fisheries expanded; that is, the percentage of the natural production of the ocean that is used by fisheries. If you use a 30%, 20%, or 10% threshold, you can see that it expanded in the seventies by about one million kilometres per year. That's about half the expanse of the Amazon every year. Fisheries expand.

Marine protected areas are therefore not really something foreign that comes from outer space, from aliens. This is the flip side of this expansion. We expand areas that before had protected the fish because we couldn't get at them. They now become available, and we have to re-establish marine protected areas.

• (0900)

The concept of marine protected areas had already been discovered about a hundred years ago, but these areas grew very slowly because we have difficulty conceiving of fish as wildlife that needs protection. We view the ocean essentially as a larder, a place where we just get food.

The idea grew very slowly, and these areas' growth became a bit more rapid, by 5% per year. But at 5% per year, given the low baseline, we were not going to reach any of the goals that Dan Laffoley mentioned. We were in a situation like the one shown in my brief

In the North Atlantic, you can see in green the areas that were protected. Yes, it's a joke. There is nothing that can be seen with the pixel size we used. There are marine protected areas here and there, including in Canada, but they're minuscule. The ocean was essentially not protected anymore.

This has changed since President Bush, of all people, created a large marine protected area around the northwestern Hawaiian island, and this was the first big marine reserve. It was made bigger by President Obama, and heads of state being who they are said, "I want one, too."

Then New Zealand came into the picture. France came into the picture, then Russia, and there is now a trend towards large marine protected areas. However, they are only within the exclusive economic zone of countries. Because they are inside the EZ of countries and because there is no legal framework for creating marine reserves in the open ocean—no country has the right to do so in the area beyond their EZ—this creation of marine reserves is essentially limited.

There will be a point at which the uninhabited islands are all marine reserves, and then we will have protected a good part of the Pacific but none of the Atlantic, none of the fishing grounds in the northern hemisphere that need to be protected.

You can see that lots of these marine protected areas, the dark blue things, the big ones, are being created in the southern hemisphere.

In Canada, though Dan Laffoley said that we are 33rd in the world, we actually don't have any significant marine reserves that we can brag about. Canada has been a laggard. I have been in Canada for 22 years and have heard talk and more talk. Marine reserves are not being created in Canada, and we are becoming a laggard compared with other countries.

They are very cheap to make, actually, the big ones. However, you get the same push-back from people who don't want them, either small or big ones, so you might as well create a big one. It's much cheaper. We have shown that in our paper.

The take-home message is that marine reserves effectively protect marine biodiversity for the simple reason that these reserves are the equivalent of a world in which we don't fish, and a world in which we don't fish is a world that has created the diversity that we see. That's the flip side of it.

At present, at the rate that Canada is creating marine reserves right now, it will not meet its commitment. It will not meet the 10% commitment by 2020.

The time has come to go from talk to some action.

• (0905)

The Vice-Chair (Mr. Robert Sopuck): Thank you very much.

It's always a pleasure to have disciplined witnesses who use their time efficiently and allow for more time for questions.

First, we have Mr. Hardie for seven minutes.

Mr. Ken Hardie (Fleetwood—Port Kells, Lib.): Thank you, Mr. Chair.

Thank you to our guests for being here.

I wish I had more than seven minutes. I'm sure my colleagues will definitely use their time as well.

Dr. Laffoley, you mentioned genetic integrity as one of the goals of marine protected areas. How do we square that, though, with the impact of climate change?

We see an incursion of species that used to be located in one part of the ocean, and now we're finding them in places where they didn't used to belong.

I guess I have two questions.

Is there an aspect of a marine protected areas that could do something about that, or conversely, are there some beneficial impacts of climate change and the spread of some species into other parts of the ocean?

● (0910)

Mr. Dan Laffoley: Thank you very much.

Basically, the issue is that there is an interaction, and if we strictly protect areas, allow the ecosystems to recover, and allow higher-level predatory species to recover, those areas are going to be able to counter some of the invasive species better. There is a kind of relationship in that sense.

I think there is also a broader relationship, which is that the changes that we see from climate change are going to affect the whole of the ocean, but areas that are more natural have a higher level of resilience are going to recover faster and are going to enable us to replenish the surrounding areas more effectively.

That's why we see marine protected areas in that context as a particularly valuable part of the toolkit.

Mr. Ken Hardie: When we look at the growth in fishing and the amount of ocean area that's basically being mined for this fisheries resource, a couple of questions arise out of that.

First, the fact that we're fishing deeper and more broadly indicates that there's a demand for those products commercially. Is this a matter of world demand simply growing that quickly?

Are there some things that we need to do? In terms of the efficiency of these operations, are we wasting, for instance, a lot of what we catch? Could there be better management of what we are catching right now that could reduce the pressure a little bit on the growth that you've seen?

Mr. Daniel Pauly: Much of the fishing that we expend, much of the growth that you have seen, is not needed for our harvest. Most of it is the result of competition between different countries that want to fish, to bring the fish to their country, rather than see it going to another country.

We could make do with about one-quarter of the fishing capacity that we have. Each boat is actually losing money. Internationally, lots of the international fleets that are operating are kept afloat only by government subsidies.

We are wasting a huge amount of fish for two reasons. About 10 to 15 tonnes per million tonnes of fish are discarded every year as part of the regular fisheries operations, including in Canada. That is the standard operating procedure, including for cod in a shrimp fishery.

Another enormous source of waste is the use of food fish for making fishmeal. Every time you eat salmon, you are actually eating mackerel and sardines that have been turned into fishmeal for salmon, a food that sells at a higher price. We waste an enormous amount of food that way—about one-third of the world catch is turned into fishmeal and wasted that way.

Mr. Ken Hardie: To both of you gentlemen, could you comment on necessity, practices, and implications of aquaculture for protecting the ecological integrity of the ocean?

I'll start with you, Dr. Laffoley.

Mr. Dan Laffoley: We've been taking a close look at this and the relationship between aquaculture and marine protected areas. We believe there are better choices that can be made by the industry in relation to some of the points that Daniel Pauly has already made.

Farming higher level species and feeding fish to fish doesn't make much sense, but smaller-scale aquaculture involving bivalves and other things may have some compatibility with some categories of marine protected areas.

We need to get a better understanding and a better application of that relationship.

• (0915)

Mr. Daniel Pauly: Basically, aquaculture as we understand it in the west or in Canada, is feeding fish to fish, and that does not produce fish; it consumes fish.

Aquaculture, as conceived here, consumes fish. The aquaculture that produces millions of tons of fish is actually of bivalves and animals very low in the food world, such as carp. These are fish that are not very popular in Canada, but they make up the bulk of what China and other countries, especially in Asia, contribute to aquaculture.

When we talk about aquaculture being a very dynamic sector that will feed the world, we actually have a little bit of salmon floating on top of an immense production of animals low in the food world.

We think that salmon is aquaculture, but it's not. Aquaculture is a way to improve the quality and the price of what you sell, but it is not a solution to the food crisis—if you want to describe it like this—any more than Maseratis are for the transport of people.

Mr. Ken Hardie: I hope I have time for one more question.

The Vice-Chair (Mr. Robert Sopuck): No, that's it.

Just to slightly correct the record here—and I represent the largest canola-producing constituency in Canada—the percentage of plant meal in fish food is increasing all the time and canola, as we know, has been an increasing part of that. There's been great success, and I think that up to half of the fish meal that's now fed to salmon is canola.

The point about the seriousness of feeding fish to fish, I think, is very well taken, but the use of canola meal is starting to reduce the use of fish in fish meal.

Anyway, that's a little plug for my constituency and my canola farmers. I am still a politician after all.

Anyway, it's Mr. Arnold for seven minutes.

Mr. Mel Arnold (North Okanagan—Shuswap, CPC): Thank you, Mr. Chair, and thank you both Mr. Laffoley and Mr. Pauly for being here.

First of all, Mr. Laffoley, does the IUCN have a mission statement or goal statement, and if so what is it?

Mr. Dan Laffoley: I can't immediately put it up, but yes we have a clear mission statement. It is effectively about the engagement of civil society in the protection, management, and sustainable use of ecosystems, and about ensuring that a fair proportion of those ecosystems are effectively managed and protected for future generations.

Mr. Mel Arnold: Okay, thank you.

Can marine conservation be done without upsetting the balance between the protection of the environment and local economies that depend on fishing and aquaculture?

Mr. Dan Laffolev: Yes.

I think there's a really interesting relationship here. The use of the environment is also dependent on the protection of the environment, and we're actually well out of balance.

Dr. Pauly has also described the expansion of fisheries, but as I touched on towards the end of my evidence, the existing problems that we've been dealing with in the relationship of the fisheries to the health of the environment and pollution are now being met by more wholesale changes resulting from climate change. The oceans are

tending towards more acidic conditions, are holding less oxygen, and getting warmer. That pushes us still further out of balance. If we want to maintain the benefits that we see from fishing, we also need to protect a reasonable proportion.

As I've explained in my evidence, and as Dr. Pauly explained as well, we are out of balance with that and we need to play catch-up. A number of countries, as I've described, are already doing this, and Canada has made commitments to be on the way to doing this as well.

• (0920)

Mr. Mel Arnold: I believe you stated that current management systems are failing. Can you say why that is? Why are the current systems failing?

If we were able to correct the failings in those current systems, would we require marine protected areas, or would better management systems basically cover the need for protection and conservation without the need for preservation?

Mr. Dan Laffoley: I think the issue is that we're taking too much out of the ocean and not protecting enough of the ocean.

I think the reality is about getting a better balance on that and ensuring that we do protect a core element of ecosystems along the way, to enable us to maintain those values in the future.

Mr. Mel Arnold: Would that require better management of the fisheries that are in place or the exploitation rates?

Mr. Dan Laffoley: It's multiple things.

I sit here looking at my own community of marine-protected-area specialists and governments committed to it, saying that we actually need to do better. We need to do better in the level and scale of management.

We know that if we put management in place for protected areas, we can triple the benefits that people are currently getting. It's a good investment point, but at the same time we need to improve the management of fisheries.

The reality is that it's not one or the other; it's all. We need to be improving the wholesale management of the marine environment and see a better structure around the management overall.

Mr. Mel Arnold: I guess it becomes a fine line between managing all of the fisheries and exploitation, so that the entire marine system becomes a protected area in some sense, without necessarily setting aside specific areas or exclusion zones for many operations.

Where do we find that balance?

Mr. Dan Laffoley: They represent slightly different approaches in my book.

Protected areas that fully protect ecosystems are what we call in situ conservation, which enables you not necessarily to understand all of the linkages in the chain, in the food webs, but that it produces greater resilience, greater protection.

Fisheries management tends to focus on individual species, perhaps, outside the context of the wider impacts on the environment or other fishing happening in an area.

Mr. Daniel Pauly: An analogy is perhaps the big forest that we have in B.C.—these enormous trees. We could not have them if we did a little bit of agriculture in the forest. We have them because there are certain areas where we say we have no logging, no agriculture, nothing. Therefore, we have those trees.

If we had a little bit of agriculture and we permitted the use of chain saws only every second day or every second Sunday, they would all be gone. Regulating the exploitation of certain animals is not possible—

Mr. Mel Arnold: If I can, I would like to move on and clarify one other statement, that Canada is ranked 33rd in protected areas.

Could you put this into context? Is that comparing total area per country, percentage of marine area to land mass, or per capita? How does this correlate to biodiversity protection, and so on?

That may be complicated.

Mr. Dan Laffoley: It's a simple statistic.

It's more complicated under the surface, but this is based on the statistics of the protected areas that Canada has officially supplied to the world database on protected areas. It is an area-based measurement of how much you have currently protected within your area of jurisdiction of sea, compared to statistics from other countries, so it's [Inaudible—Editor].

Mr. Mel Arnold: Percentage-wise, or did you say it was based on effectiveness?

Mr. Dan Laffoley: No.

Basically, one of the statistics that is gathered for the Convention on Biological Diversity is the area of ocean that countries are committing to marine protected areas, and it is that statistic alone.

There are, obviously, as we've been talking about in these questions, a lot of issues about making sure that not only do you have areas, but you have effective management in place as well.

The Vice-Chair (Mr. Robert Sopuck): I'll have to stop it there. Thank you very much.

Mr. Donnelly, you have seven minutes.

Mr. Fin Donnelly (Port Moody—Coquitlam, NDP): Thank you, Mr. Chair.

Thank you to our witnesses for providing testimony on this important subject.

I want to start by mentioning the purpose of what we're doing here. We're examining the criteria and process being used to identify and establish marine protected areas, or MPAs, with the objective of ensuring that the criteria and processes are aligned to achieve, for example, the intended benefits of MPAs.

Dr. Laffoley, perhaps I could start with you. You defined what an MPA is. You also talked about key proven tools for the conservation of nature. I'm wondering if you could send us evidence or studies of that. Maybe you could send your top five or ten studies to provide this committee with key evidence that these MPAs are key proven

tools. You also mentioned that there's a good body of evidence on how we can protect MPAs. You referenced hundreds of studies. Perhaps you could send us your key proven tools for the conservation of nature and maybe your top ten studies on how to best protect MPAs. I think the committee would appreciate that input.

As well, you talked about MPAs reversing declines of fisheries populations. You also talked about protecting the abundances of key species that these tools or MPAs are useful for. Could you elaborate a little bit more on those two things—how they reverse declines and how they protect abundance?

• (0925)

Mr. Dan Laffoley: First, I'd be very happy to provide that information. An entire initiative, called the science of marine reserves, has analyzed hundreds of peer-reviewed papers. That is one of the bodies of evidence. There was also a paper published very recently in *Nature*, and that was the one I was referencing with regard to effective management increasing the benefits. I'll provide you with those pieces of information.

Mr. Fin Donnelly: Thank you.

Mr. Dan Laffoley: Basically, on the issue of what marine protected areas do when we strictly protect an area of ocean, we find in virtually all cases that we are taking the pressure off and are allowing the ecosystems to recover to a more natural state. The statistics show that on average, we get a 446% increase in the biomass, the amount of organisms in the area, because we're no longer depleting them. We get a greater diversity.

We actually do something fundamental that is important to the interrelationship between marine protected areas and fisheries: we allow the fish to grow old. Older female fish produce more eggs that are of a higher quality. They tend to be more resilient to what I've been talking about in terms of the silent storm of climate change that we're going to face. They enable these areas to act as replenishment barriers. There is massive evidence and information on this. We can provide you with some key references.

That is effectively what you get. Any country who wants to sustainably manage its marine environment should actually know what the baseline is, which is another value of these areas. It's rather like saying, "I'm going to do my chemistry at A level, but I'm not going to use a control to demonstrate the reaction I'm doing." We're all taught that we need controls, and they provide this valuable role as well.

Mr. Fin Donnelly: Great. Thank you very much.

Dr. Pauly, you provided the committee with a graphic image of the global reported catch and how that's declining. Thank you for providing us with that information.

I have a rhetorical question before I get to my actual question. How is it that countries can fish outside their country limits but none can protect areas outside their marine limits? I just find that an interesting dynamic. I've often struggled with that, certainly on the standing committee or with the oceans caucus, which I co-chair. As countries, we can only work within our limits, but all the action or destruction is happening outside. We have no say, as countries, on how we can protect it, yet we can still fish out there.

Mr. Daniel Pauly: Actually, the fisheries, tonnage-wise, that are conducted outside of exclusive economic zones are less than 10% of the world catch. They are essentially tuna fisheries.

The bulk of the fisheries of the world are inside the exclusive economic zones—

• (0930)

Mr. Fin Donnelly: Interesting.

Mr. Daniel Pauly: —and they are, therefore, the responsibility of the countries.

Mr. Fin Donnelly: That's good to know.

You presented some visual aids here for us. Do you have a map of suggested areas in Canada's oceans that you or your organization would recommend for protection?

Mr. Daniel Pauly: On my way here yesterday, I thought, "Oh my gosh, I should have included that."

My group at UBC is not involved in policy-making. It's just providing background.

I am fairly sure, though, that Canada will meet its requirement of 10% by 2020 by putting a large marine protected area in the middle of nowhere, in the Arctic. This is what most countries are doing now. France is doing that by putting it in the middle of the Pacific, among the islands where nobody is. The U.K. has done that. The U.S. has done that.

Mr. Fin Donnelly: On land—Mr. Daniel Pauly: The Sahara.

Mr. Fin Donnelly: Well...and we do rock and ice in British Columbia.

Can you recommend where the key biologically productive areas are in our oceans?

Mr. Daniel Pauly: They should have been-

The Vice-Chair (Mr. Robert Sopuck): Could we have a short answer, please? The time is nearly up.

Mr. Daniel Pauly: There should have been marine protected areas in the areas that maintain the cod in Canada. The cod was opening the bank vault. You could help yourself to the capital instead of just fishing the interest. If you had areas along the coasts of Labrador and Newfoundland where no fishing occurred, you would still have the cod.

The Vice-Chair (Mr. Robert Sopuck): Thank you very much.

I'm going to make a quick editorial comment here.

Dr. Laffoley talked about the value of large female fish. There's been a major evolution in recreational fishing regulations whereby you're mandated to release the large fish now. Back in the bad old days, you had to release the small fish and keep the big fish, which is exactly the wrong thing to do. The cultural shift in recreational fishing has been nothing short of phenomenal. People take great pride in releasing these big fish. It's very rare now to see a big fish killed by a responsible recreational fisherman.

Anyway, we'll now go to Mr. Morrissey, for seven minutes.

Mr. Robert Morrissey (Egmont, Lib.): Thank you, Mr. Chair.

My question, I believe, is for Dr. Laffoley.

Could you elaborate a bit on the international targets? You said that Canada was a signatory to those targets in 2010.

Who made the comment?

Mr. Dan Laffoley: Yes, I made that comment. I'm just finding my reference to that.

This is the Convention on Biological Diversity that countries signed up to. There was a meeting in Aichi, Japan in 2010 to review and renew the targets. That's why they're called the Aichi targets. There are 22 targets, and target 11 is the one that involves marine protected areas.

Mr. Robert Morrissey: And Canada was a signatory to that in 2010?

Mr. Dan Laffoley: Yes, as far as I know.

I'm not too familiar with all the details of all of the discussions in Canada, but that is behind the commitment to drive forward to meet the 10% target by 2020.

Mr. Robert Morrissey: Okay, I just wanted to clarify that.

You made reference to target 6 being not so well reported on. Could you elaborate a bit more on what your concern was there under target 6?

Mr. Dan Laffoley: Yes, certainly.

The Convention on Biological Diversity undertakes regular reviews to see progress on the targets in order to let countries know how well things are going. They are aware of whether particular targets are being well reported or poorly reported.

Certainly, target 6, which is about sustainable harvesting—that fisheries should "have no significant adverse impacts on threatened species and vulnerable ecosystems" and that "the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits"—is a target they acknowledge is not being as well reported as it could be.

• (0935)

Mr. Robert Morrissey: I want to follow up on that point with Dr. Pauly.

Your graphs, to me, an MP from the east coast representing a fisheries area, were fascinatingly enlightening and put into context some of the challenges facing the fishery economy. I have two questions.

A concern has been raised a number of times at this committee that the documentation from DFO, the people responsible for monitoring catches, and the actual catches that are reported by buyers and various other parties do not match. Your graph would substantiate that part. How do we address that?

Mr. Daniel Pauly: All countries, including Canada, adhere to what is known as ecosystem-based fishing or ecosystem-based fisheries management, but that pays only lip service, because in reality we still have species-by-species management. Imagine we ban cod fishing, but actually we continue to catch cod as codlings as bycatch of the shrimp fishery. DFO does not report this catch because it is discarded. I'm bemused every time I hear, "We ceased to fish cod in 1992 because there was a moratorium." Actually, we continued to fish cod in the shrimp fishery, but if it is not a targeted fishery, the target being shrimp, the cod that are caught are not reported as being caught. This is totally absurd, but that's the way many, many fisheries management organizations work, especially in the North Atlantic. That has to be reformed, because a fish doesn't care how it is killed, whether it is killed by a targeted fishery or as bycatch. But it is built deep into the bowels of DFO that it reports only on targeted fisheries.

Mr. Robert Morrissey: That's a very good point.

I have a final question to both presenters, and I would appreciate your opinion. There's a clash between commercial fishing, with the economies of commercial fisheries, and the protection of fish habitat. We hear presenters from the fishing community and the communities they represent. Could you both comment on that briefly? Do you see that within marine protected areas the two can operate and achieve the same objective, that commercial fishers can earn a livelihood and support the communities they're from, as well as protecting the long-term sustainability of the fisheries in those areas? Or is it simply no?

Mr. Daniel Pauly: If I may, the fisheries should never be seen as one thing. Aquaculture is not one thing; it is carnivores and other aquaculture. It's the same thing in Newfoundland and Labrador: you have small fishers who cannot go very far, and those detected the loss of cod. As well, you have trawlers, big trawlers, of the type I was in when I was a student, and they can go where the fish are, anywhere. Those don't notice the stock dwindling because they always stay at the centre of the concentration. Canada is in the process, our country is in the process, of reopening a fishery to big trawlers. The historic fishery for cod was 100,000 to 200,000 tonnes by small-scale fishers who operated down to a depth of 100 metres. Now, if the fishery is reopened to big trawlers, again the stock will be available—all of it will be available—and fished out. We must concentrate on the small fishery, which is compatible with conservation.

The Vice-Chair (Mr. Robert Sopuck): We'll let you add to that if you'd like, Dr. Laffoley.

• (0940)

Mr. Dan Laffoley: I agree with that. For me it is about looking at that intersection between commercial interests and conservation interests, and realizing that protected areas can be an essential part of that process.

I would add that I think we may make some interesting strides in this direction in the coming years. The target I mentioned, target 11, talks about marine protected areas and other effective area-based measures. We are working with the Convention on Biological Diversity, and actually with Fisheries in Canada as well, to look at what that overlap looks like. There are things out there, area-based measures, that, if they fulfill the criteria under target 11 of in situ conservation, should be better recognized as valuable contributions. At the same time, that may provide us with greater clarity on how to inject greater benefits into the fisheries side.

There are important developments coming.

The Vice-Chair (Mr. Robert Sopuck): Great. Thank you very much.

We'll let Mr. Arnold finish off, for four minutes.

Mr. Mel Arnold: Thank you, Mr. Chair.

I think I'll pose this question to both of you to answer individually, if you could.

I'd like to get your opinion on whether operations other than fish stock exploitation—fishing and so on—such as whale watching, shipping, natural resource extraction, and tidal energy, can be continued within MPAs if they're deemed to have a negligible effect on the desired biodiversity protection goals of those MPAs. Are those types of operations still possible within an MPA?

Mr. Daniel Pauly: I'll go ahead and say yes.

Mr. Dan Laffoley: Would you like me to go?

The Vice-Chair (Mr. Robert Sopuck): Certainly, Dr. Laffoley.

Mr. Dan Laffoley: It depends on the objective of the marine protected area in question. As Dr. Pauly mentioned, countries will put aside areas for strict protection, for the continued survival of biodiversity, where there are only activities like tourist visits. Sometimes tourist visits are compatible.

You have situations where there is perhaps some compatibility, but then in multiple-use marine protected areas, we accept sustainable activities that can have some impact. There is a continuum in that process. It doesn't mean that if you are stopping fisheries you should stop other things. It depends on your objective for the marine protected area.

Mr. Mel Arnold: That's very clear. I think MPAs can have different objectives, so other operations could still be allowed within those MPAs.

Mr. Daniel Pauly: Yes.

Mr. Dan Laffoley: It's the continuum I described in the official guidance we have.

Mr. Mel Arnold: Dr. Pauly, do you have anything further?

Mr. Daniel Pauly: A good example is the Great Barrier Reef, which is now in danger from global warming. A wide range of activities are allowed around the Great Barrier Reef. There are certain areas where only research is allowed, and in very few areas not even that, and other areas where you can have an expedition, actually.

Mr. Mel Arnold: Thank you.

This gets me back to one of my earlier questions. It was about Canada ranking 33rd. Would some of our fisheries restrictions and regulations not even qualify for consideration of what is actually protected already?

Mr. Dan Laffoley: That's what I was just talking about as part of the development of the guidance we're working on. In addition to marine protected areas, there is the phrase "other effective area-based measures".

If there is a fisheries closure that achieves in situ conservation of biological diversity as part of broader fisheries management, an areabased closure that is long term and is about actually ensuring the continued persistence of nature and the fish in that context, that is a potential area that could cross over from having the fisheries management target of sustainability to being recognized also as an effective conservation area alongside marine protected areas. That's the guidance we're trying to work on. I think it's a big opportunity to have some very interesting discussions with the fishing sector.

Mr. Mel Arnold: Would they have to be actual closures, or very strict restrictions?

● (0945)

Mr. Dan Laffoley: At the moment, those areas are different from marine protected areas. The origin and journey may be different, but the outcome should be the same: in situ conservation. Your governance of it would need to ensure the continued persistence of the conservation value.

As I said earlier, governance comes in many different shapes and forms. It's about degree of control and ensuring that you have the degree of control for the persistence of the conservation value in the future. There will be fisheries areas that meet that. Large areas protected for historic wrecks and war graves may also meet that, because the outcome happens to match the sustaining of the conservation value.

The Vice-Chair (Mr. Robert Sopuck): I'm afraid we'll have to stop right there.

I want to thank our guests for two very informative presentations. Too often, many of our witnesses give presentations that are general in nature. What I certainly appreciated about yours were the very practical suggestions backed up by very detailed research. I think your testimony will be very helpful to the committee as the report is developed.

With that, I'm going to suspend for a few minutes while we change to our next witnesses.

Again, thank you very much.



• (0945)

The Vice-Chair (Mr. Robert Sopuck): The committee will reconvene.

We have our next two witnesses for the next hour. From the B.C. Wildlife Federation we have Al Martin, director of strategic initiatives, and from the Maritime Fisherman's Union, we have Michel Richard, union staff member.

Our witnesses will each be allowed 10 minutes. I will try to keep you to that 10 minutes because our committee is very eager to ask questions.

With that, Mr. Martin, you have 10 minutes for your presentation.

Mr. Alan Martin (Director, Strategic Initiatives, B.C. Wildlife Federation): Thank you very much, Mr. Sopuck.

Briefly, I'll tell you who we are.

The B.C. Wildlife Federation is a province-wide voluntary conservation organization representing all British Columbians whose aims are to protect, enhance, and promote the wise use of the environment for the benefit of present and future generations. We have 50,000 members in 110 clubs, and certainly we're passionate about conserving and protecting the province's fish, wildlife, and habitat. As an organization, we try to lead in conservation and wise use. Conservation sustainability is a priority of our organization.

In terms of natural resource management, we have a number of principles that we turn our minds to with respect to marine, terrestrial, and aquatic resources. I think natural capital is best conserved by protecting and enhancing existing habitats, and this rule applies to marine, freshwater, and terrestrial habitats.

In a handout that I understand will be distributed to you later, I have provided the marine protected area definition under subsection 35(1) of the Oceans Act. A marine protected area is an area of sea that forms part of Canada's internal waters, territorial sea of Canada, or exclusive economic zone and "has been designated under this section for special protection for one or more of the following reasons". Those reasons are protection of marine fish, mammals, and habitats, and conservation of unique habitats. I refer to this because it is the instrument that is used by DFO in marine protected areas. There are many other pieces of legislation, federal and provincial, that are used to support marine protected areas, but this is the one that is focused on in terms of design.

The International Union for Conservation of Nature has a number of marine protected area classifications, and I would suggest that marine protected areas should be designed based on the conservation outcomes, rather than to fit classifications and percentage targets. I think percentage targets are aspirational, but the purpose of marine protected areas is to protect those resource outcomes and should be designed with that in mind, rather than to fit classifications.

In terms of marine protected areas, in British Columbia there are four different areas under consideration: the offshore area; the northern shelf, which is covered by PNCIMA; the southern shelf; and the Strait of Georgia. There are a variety of protected areas in each one of these, but the northern shelf has been a focus of a coordinated effort through PNCIMA to establish a marine protected area network.

The B.C. Wildlife Federation supports the establishment of marine protected areas as an area-based measure to protect natural resources, with the following conditions: they are science based; they're effective in achieving conservation outcomes; they're established in consultation with other levels of government, first nations, industry, and the public; and, clearly, they need to be monitored and enforced, adaptive, and used in combination with other management tools. Marine protected areas in themselves don't need other management support and will not be effective in isolation. Finally, there needs to be clear governance accountability and reporting around marine protected areas.

In terms of the current context, the Canada-British Columbia marine protected area network strategy was released in 2014. It's a very good document that sets out the vision.

• (0950)

Certainly, there was an announcement made by the Minister of Fisheries and Oceans in June that 5% of marine coastal areas would be protected by 2017 and 10% by 2020. This year, the Pacific north coast integrated management area plan was endorsed by federal and provincial governments and first nations. Then a day later, a new Hecate Strait/Queen Charlotte Sound glass sponge reefs marine protected area was established and announced unilaterally by the federal government. I think the context around this is the question of whether marine protected areas are being driven rapidly by percentage targets, and have they sufficient scientific, community, and financial support to make them operate effectively in the longer term. It's our hope that we do not have a number of marine protected areas established and the boundaries put in place, and then have the focus of conservation and marine resources move on, leaving areas that have not had sufficient time, effort, and resources put into their establishment for them to be effective. Certainly, that's a fear of ours.

There are a number of goals for a network of marine protected areas on the Pacific coast of Canada and for PNCIMA, including the protection and maintenance of biodiversity, ecological representation, and special features; and the conservation and protection of fishery resources and their habitats. The other four goals are related to recreation, community and economic stability, cultural heritage, archeological research and resources, and scientific research. I think there is a fairly good policy framework in terms of protection of marine resources, but there is a lot of work to do in the other areas. The question is, how do you move this forward in a coordinated fashion so that you meet these goals, or do you stage implementation?

The marine protected area network planning for the B.C. Northern Shelf has a number of steps that are focused on having network action plans finalized into one option by March 2019. I think the planning principles and the network objectives at a high level have been established. The design guidelines for these areas are basically

a checklist. The conservation priorities are basically a question: is a marine protected area the best solution? The design strategies have not been finalized. Recent papers by the Canadian Scientific Advisory Secretariat, which did a pilot ecosystem risk assessment for the Pacific north coast integrated management area by Murray, Mach, and Miriam O, basically said that they looked at this on a cumulative basis and that their analysis should not be used for policy recommendations. Clearly, there is much work to be done on the ecological end of this, let alone on the other planning objectives.

● (0955)

The Vice-Chair (Mr. Robert Sopuck): You have one minute left.

Mr. Alan Martin: One minute?

The Vice-Chair (Mr. Robert Sopuck): Yes.

Mr. Alan Martin: A related issue is that large, offshore Pacific MPA processes have been announced regionally by DFO. Certainly, because it's offshore, it may be seen as low-hanging fruit. There is a review of rockfish conservation areas as MPAs going on. It appears that there was not any consultation with the Sport Fishing Advisory Board, the major group that represents anglers, on the process. There is a proposal to streamline MPA designation to decrease the time that it takes to make these designations. I would certainly recommend that these designations be related to marine reserves and that there be proper time to get the science, social support, and funding in place and the monitoring done before the final designation of these areas.

● (1000)

The Vice-Chair (Mr. Robert Sopuck): I'm afraid we'll have to stop there. Thank you.

In the question and answer period, witnesses are often able to get other points out that they weren't able to make in their first talk.

Now we'll go to Monsieur Richard for 10 minutes.

[Translation]

Mr. Michel Richard (Union Staff Member, Maritime Fishermen's Union): Thank you, Mr. Chair.

In the spirit of our sesquicentennial, I will give my presentation in my mother tongue.

Thank you for the opportunity to appear on behalf of the Maritime Fishermen's Union.

Our organization represents inshore fishers and communities along the east coast of New Brunswick, and a significant number of owner-operators in Nova Scotia. Our 1,243 members support themselves and contribute to their respective communities.

I would like to address the main points in the mandate letter of the Minister of Fisheries, Oceans and the Canadian Coast Guard, as well as a few paragraphs in the mandate letter of the Minister of the Environment and Climate Change. I would also like to offer the inshore fishery's perspective on the objectives in the strategic framework for marine protected areas.

My presentation will also reflect the holistic approach to the fishery that the MFU has consistently taken in order to ensure the prosperity of coastal communities in the Maritimes.

As our colleagues from the Canadian Independent Fish Harvesters stated last November, Fisheries and Oceans Canada is currently focused on the conservation and protection of marine species, but we feel the department's perspective is not broad enough for communities with a sustainable economy. As the stewards of the fishery, we feel a broader perspective is essential.

Each of the ministerial mandate letters talks about consulting and including communities as part of the processes concerned. However, we do not believe that this has been done so far.

To begin with, the mandate letter for the Minister of Fisheries and Oceans talks about such subjects as following up with stakeholders in a spirit of collaboration. I can tell you that the industry has not seen this spirit of collaboration yet and we are skeptical about the follow-up to the processes that have been introduced.

At this point, I would like to refer to a paragraph in the mandate letter for the Minister of the Environment and Climate Change, which speaks of the need to "review Canada's environmental assessment processes to regain public trust." Your government promotes the values of inclusion, honesty and hard work, and considers collaborative planning to be one of its guiding principles. That is why, at this point, I would like to raise the following concerns in the interest of improving the consultation process on marine protected areas.

The mission of this standing committee should be to conduct a committed and thorough review of the consultative process for marine protected areas. Too often we have heard the concerns of industry stakeholders and our members about what constitutes a marine protected area. What exactly does that mean to many people?

We believe the next step must be to clearly communicate the geographic boundaries of potential marine protected areas as well as the impacts on current fishing practices in these areas. People participating in the inshore fishery must have the opportunity to demonstrate the non-adverse effects of their fishing practices on the marine habitat.

During fishery advisory board discussions to date—lobster, crab, herring—, stakeholders have expressed their serious concerns about whether a marine protected area places restrictions on fishing gear, and departmental representatives could not provide clear information. Consider for example crab fishing area 19, which was raised during discussions through a supporting document.

We would also like reassurance that establishing a marine protected area will not have unexpected negative impacts on our way of life. The industry must also be persuaded that the consultative process takes into account the economic, social and environmental impacts of identifying marine protected areas.

In closing, we believe it is important for the traditional uses of ocean resources to be respected and for consideration to be given to the values of resource users, such as the members of the Maritime Fishermen's Union, which I represent.

We strongly believe that the objectives of marine protected areas can be achieved, but there must be a true consultation process that does not consist of simply sending a few documents to associations and stakeholders, and holding a few question-and-answer periods during inshore fishery advisory board meetings.

● (1005)

I believe that this forum is an excellent opportunity to consider proposals for a thorough consultation process with the goal of encouraging a spirit of cooperation on the part of the inshore fishing industry.

[English]

Our focus is on process and ensuring that our membership can continue their fishing practices.

I'd like to further refer to certain elements of mandate letters. There is often talk about the consultation process, but once again as we stated earlier, it is very limited in the scope of presentation, and we have noted that it's very limited in terms of coordination between the department officers and managers. Nobody gets the same story.

There are often buzzwords in those documents that some of the members of the industry see, and talk about how it must be done quickly. This recurs very often. We understand that this concept is lacking in the gulf area. We understand that, but the creed of the MFU is to protect coastal communities and encourage fisheries that have very limited impact on the ecosystem and other species.

With this, I would like to thank you for your time.

The Vice-Chair (Mr. Robert Sopuck): Thank you, Monsieur Richard. You had three minutes to spare. I think that's a record, and we really appreciate that.

The first questioner, for seven minutes, is Mr. Finnigan.

Mr. Pat Finnigan (Miramichi—Grand Lake, Lib.): Thank you, Mr. Chair.

Merci. Thank you, both of you, for being here today as witnesses to our study.

[Translation]

Welcome to the committee, Mr. Richard. I certainly support your efforts and work on the east coast.

Since we are talking about marine protected areas, I would like to know if inshore fishermen are aware of the need to protect the environment and resources. **Mr. Michel Richard:** Certainly. The Maritime Fishermen's Union and our colleagues in the lobster and snow crab fishery are very proactive in developing fish preservation measures.

The traps used in lobster fishing are one example. With all their escape mechanisms, the traps almost always contain just lobster and the remaining bait when they are pulled up. During discussions on these matters, organizations such as the Maritime Fishermen's Union were rather visionary in suggesting that participation be limited, in terms of fishing practices, and in particular that cages be lowered to the bottom, which has a limited impact on the seabed and does not target other species.

Mr. Pat Finnigan: We have been fishing for 150 years or more.

Would you say that some species or resources have disappeared or are at risk of disappearing and, as the case may be, that you have been able to manage these resources, whether lobster or crab?

Mr. Michel Richard: Certainly. We primarily fish two species. It has been shown that lobster has been incredibly abundant in recent years. As part of the Maritime Fishermen's Union's Homarus program, a research group is inseminating lobster, pure and simple. In fact, they are inseminating lobster eggs.

We are also conducting artificial reef projects in cases where fishermen find there are not enough habitats. With regard to these fishing practices, I fully support the thinking and proactive participation of our members, excluding the fishing practices that Mr. Pauly referred to. That was in the 1990s and the fishing gear was much larger and more effective than what we use in our coastal fishery. Mr. Pauly said that small-scale fishing practices are highly compatible with conservation principles.

• (1010)

Mr. Pat Finnigan: I think it was also Mr. Pauly who referred to bycatch. Can that bycatch be managed? Could fishermen consider this bycatch that should not have been caught?

Mr. Michel Richard: Yes. In recent years, our members have worked well together to find ways to improve the catch report. The industry is developing an electronic report system that will properly document the bycatch.

With their fishing gear, our fishermen do not have any bycatch. Similarly, with the introduction of the Normor grate—a very selective mechanism for shrimp fishing—, the other fleets have not seen any of the bycatch that my colleague, the previous witness, mentioned.

The industry and the MFU are collaborating 100%. Now it is our turn to ask you why the concept of marine protected areas, which dates back to 2005, is suddenly such an urgent matter.

What we want is to participate in the discussion and share information. Then we would like to participate in the consultative process and put ideas forward.

Mr. Pat Finnigan: I don't know if there will be a protected area in the zone we are talking about, but if all these things were done, do you think the fishermen would be agreeable to having a protected zone where you could still fish?

Mr. Michel Richard: With a very structured and transparent process, I think the fishermen might even in some ways advise the

managers who want to propose marine protected areas. We also have concerns. Oil exploration is one of those concerns.

[English]

Mr. Pat Finnigan: Mr. Martin, do you know if there are any MPAs that the government or DFO would have to interfere in or comanage if there were an issue in that zone? Do you know of any MPAs where government could manage a certain species, or seaweed, or something? Are you aware of that?

The Vice-Chair (Mr. Robert Sopuck): Mr. Martin.

Mr. Alan Martin: On the west coast there are specific rockfish conservation areas. They are not classified as MPAs under the Oceans Act, but effectively there are area-based restrictions that are designed to conserve areas of abundance of rockfish. I think the idea is good, but the issue is that in order to maintain their effectiveness there needs to be more monitoring and enforcement of that. Rockfish conservation areas are certainly supported by a range of angler groups, both commercial and recreational anglers, in order to maintain those fishery resources.

The Vice-Chair (Mr. Robert Sopuck): I'm afraid we're out of time

Mr. Arnold, go ahead for seven minutes.

Mr. Mel Arnold: Thank you, Mr. Chair.

Thank you to both of our witnesses for being available today. I'll start off with Mr. Martin.

You mentioned a couple of documents, one by Murray, Mach, and Miriam O, and I believe there was another one you referred to. If it's possible, could you get the related information to the clerk so that we might be able to distribute that within the committee? They sound like very interesting documents. You mentioned the PNCIMA consultation process and some of the other consultation processes. What has been your experience from an ear-to-the-ground perspective out on the west coast as far as consultations with the provincial government, local governments, municipalities, coastal communities, and commercial and public fisheries out there go?

● (1015)

Mr. Alan Martin: The consultation around PNCIMA has been focused a lot more on process than substance. It has had good representation from first nations, but in terms of the angling community and the fishing industry, not so much. The PNCIMA process certainly is one that's driven collaboratively by the province, DFO, and first nations.

My view is that it has huge expectations, short timelines, and limited resources. This makes it difficult to do the scientific and other required consultations with communities and stakeholders. These are needed to contribute to the design and successful implementation of what are, at the moment, concepts to protect valuable fisheries and habitats.

The key question is: are marine protected areas the right tool, and what other actions are required in order to maintain those resources?

Mr. Mel Arnold: Thank you. That kind of brings me back to a question I had for our previous witnesses. I questioned whether the official definition of a marine protected area needs to encompass areas that have fairly tight restrictions on fishing or other activities that may not necessarily be considered an MPA under the Oceans Act.

Canada has done a lot as far as improving our fisheries management, but we have probably a long way to go yet on that. Should some of that fisheries management also be considered as partial MPAs or included in that grand MPA total that everyone wants to count?

Mr. Alan Martin: I think the outcome that we're trying to achieve is good fisheries management, not to have a prescribed level of MPAs. If MPAs contribute to good fisheries management and are appropriate, clearly you can apply them. If they're not useful for maintaining the habitat or the stocks, use another method. That analysis is lacking.

I will use an example for you. Northern abalone are rare and are listed under SARA. The SARA recovery plan says that habitat is not an issue for maintaining the species, but overharvesting is. The question is, would you implement MPAs to protect a species where the recovery plan says that habitat is not an issue? There needs to be a clear line of sight between the outcomes that you're trying to achieve and the application of a tool, whether it's an MPA or any other restriction.

Mr. Mel Arnold: Thank you.

Mr. Richard, you mentioned that there are certain elements of the mandate letters around consultation and so on that don't necessarily translate through to the department when it comes to being in the field or on the ground.

Can you elaborate a little further on that?

Mr. Michel Richard: We knew this was kind of a dormant file, which unfortunately had been relegated to the myth or concept of politics. Then our current government opened up the tomb and noticed that one thing was lacking. One mandate of theirs was lacking. So there is a frenzy right now to pass messages along, and we're certainly not saying that we're opposed to it. We're saying—and I'll quote myself—that "little parachute meetings do not constitute a consultation".

I think we're close to implementing a very transparent process, and I am very honoured and privileged to be part of this for the MFU, but I think this is kind of a ground zero if we want to approach this issue. For example, I can't speak for the representatives of crab fishing area 19 because we don't have members there, but I can relay their expression when one item was added to the advisory committee for snow crab, which was to talk about an MPA in their crab fishing zone. It was total shock and surprise.

• (1020)

Mr. Mel Arnold: It's interesting to hear your remark about some rattling within the department trying to meet these targets, because we've certainly heard different things from the minister about things

being under control. Everything we hear from everywhere else is that everyone's scrambling to try and figure out how to do this.

Mr. Michel Richard: We have given our minister the utmost support on these issues based on renewed transparency on these issues.

The Vice-Chair (Mr. Robert Sopuck): That's time.

Mr. Donnelly, for seven minutes.

Mr. Fin Donnelly: Thank you, Mr. Chair, and thank you to our witnesses for being here and providing your testimony.

Mr. Richard, you talked a lot about the process and the concerns with it. Could you describe for the committee what you think would be a good consultation process for the government? You did make some comments about what it shouldn't be and what it's not, and a few about what it could be, but could you elaborate a little?

Mr. Michel Richard: I understand, first of all, that they're running against the clock. We have structures of leadership within the associations in P.E.I., and we have memberships in Nova Scotia as well, and to relegate the item of MPAs in the context of advisory committees is totally insufficient. The first step that should be taken is to focus—not to bastardize the word focus—and to have very specific meetings on MPAs and invite industry representatives. That would certainly be a first step.

Mr. Fin Donnelly: Mr. Martin, were you able to hear the two previous presentations from the IUCN and Dr. Pauly?

Mr. Alan Martin: No, I didn't.

Mr. Fin Donnelly: We heard the two witnesses state that in the opinion of the global community, there is too much fishing and there is an imbalance of protection. You talked about PNCIMA. Do you agree with that planning process, and does the B.C. Wildlife Federation agree with that planning process?

Mr. Alan Martin: PNCIMA is a good concept because it involves first nations. It involves the federal government and the province, and it is comprehensive. What I don't agree with is that if individual entities go off and do their own thing, in the absence of that larger planning process, that takes away from the effectiveness and integration,

Mr. Fin Donnelly: Undermines it.

Mr. Alan Martin: Yes, it undermines it.

PNCIMA is for the northern shelf. There are larger issues in terms of fishery sustainability on the west coast, some of which can be dealt with through a marine protected area process. Others need to be done by a fundamental restructuring of fisheries. It's applying the appropriate tool, at the appropriate scale, and over a time frame that will be effective.

Fisheries and protected areas are part and parcel of the same problem, but they operate at quite different scales, depending on the species and the management objective you're trying to achieve.

I agree with Mr. Pauly that certainly, if you read the fisheries literature, there is a problem with overexpectation. It's increased effort, lack of monitoring and enforcement, and compliance with catch landing. These are all other things that need to be addressed.

● (1025)

Mr. Fin Donnelly: Excellent.

Is BCWF a part of PNCIMA, or are you involved at the table in any way?

Mr. Alan Martin: Yes, we have been commenting on the design criteria and process, and we certainly are engaged in the federal process as well. Our intent is to be constructive, and that these marine protected areas should be focused on achieving conservation outcomes, not arbitrary percentages over a short-term. They certainly need to be adaptive and they need to be improved over time. I would not like to see an implementation of marine protected areas on a rapid basis, and then the agenda moves on, and we lose a tremendous opportunity to manage these resources, including communities, the fishing sector, and first nations.

Mr. Fin Donnelly: We've just heard from Dr. Laffoley from the IUCN, who talked about using MPAs to reverse declines in fisheries populations and to protect the abundance of key species. He said that MPAs can be effective tools for doing just that. Do you agree or disagree?

Mr. Alan Martin: I think MPAs can be used to protect species, particularly those that are highly territorial or resident in particular areas. For those species that are far-ranging, such as tuna and salmon, MPAs probably will not be effective, because there is a high degree of variation in terms of how these species migrate during their adult life stages.

I think MPAs on estuaries and in rearing areas certainly could contribute to the health of salmonids. It needs to be backed up with science, and it needs to be related to the "valued ecosystem component" that you're focusing on.

I'm not sure that they have the data to drive this. I think they need to invest in the science to design areas that are effective, and they need to adapt them to conditions that change over time. This is a very complex issue that you're trying to deal with, and a simple solution of MPAs.... Well, there is no simple solution. They need to be intelligently designed.

Mr. Fin Donnelly: I think I'm out of time, but I want to say, Mr. Martin, that I've appreciated your testimony, and we could bring you back another time to talk about watershed management. I wanted to get that on the record.

Voices: Oh, oh!

Mr. Alan Martin: Thank you.

The Vice-Chair (Mr. Robert Sopuck): I would concur with that.

Ms. Jordan, please, for seven minutes.

Mrs. Bernadette Jordan (South Shore—St. Margarets, Lib.): Thank you, Mr. Chair.

Thank you to our witnesses for appearing today.

My first question is for you, Mr. Martin, because you made what I thought was quite a broad statement. I'd like to have you expand on it a bit. You said that DFO unilaterally announced an MPA, and I believe you said that it was the Hecate Strait. "Unilaterally" and "announced" were the actual words you used. Are you saying there

was absolutely no consultation with anybody on this before they made that announcement?

Mr. Alan Martin: Are you talking about the glass sponge reefs?

Mrs. Bernadette Jordan: Yes.

Mr. Alan Martin: They are in the PNCIMA area.

The day before that, they announced the adherence to the PNCIMA process and marine protected areas. On the following day, the Department of Fisheries and Oceans announced the sponge reef marine protected areas. Given that it was in the northern shelf and that there are a wide range of interests there, I think there could have been broader consultation in advance of that announcement, and that consultation, to my knowledge, did not occur.

Mrs. Bernadette Jordan: Okay. You said "broader consultation", so was there any consultation with any of the groups involved in that area?

● (1030)

Mr. Alan Martin: Yes, certainly there would be with the BC Seafood Alliance, and Christina Burridge was part of the announcement. First nations were part of the announcement. It was not done collaboratively as part of the PNCIMA process. It was done unilaterally as a DFO initiative.

Mrs. Bernadette Jordan: Maybe both of you could address this, because one of the things we've heard about time and time again is the lack of trust between industry and groups like yours, Mr. Martin, and DFO. Can you comment on that? Do you trust the process that DFO goes through?

Mr. Alan Martin: I'm part of a number of processes with DFO, including the Sport Fishing Advisory Board, and certainly I'm part of the planning process that DFO is involved in with PNCIMA.

I think the issue with DFO is the capacity to provide support for consultation, along with the timely sharing of information that is required by stakeholders, industry, and others in order to form constructive and positive advice, and to also have those sectors understand what resources are at play and what trade-offs are being made. In many cases, those trade-offs are not explicit and are hidden or implicit. That information is certainly required by all groups to maintain the social support for what I think are potentially very valuable measures to protect environmental resources.

Mrs. Bernadette Jordan: Mr. Richard.

Mr. Michel Richard: Maybe it's because of the translation, but I was looking at my document and I was thinking, I don't think I used a scathing word such as "trust".

Mrs. Bernadette Jordan: No, you didn't. Others have. I'll qualify that.

Mr. Michel Richard: What we need to build on is to focus more on where we're at now, what needs to be done, how they communicate this clearly without raising a panic within the membership and the coastal communities, and to say, "Okay, if we're doing this, we're doing this for the benefit directly of the habitat, the resource, and it's targeted at reducing certain fishing practices".

What was done in regard to the sponges, for example, even though it was presented in a very blitzed way, seems to have been a targeted benefit. As I stated earlier, when we address questions of marine habitat and resource protection in communities, we always have very overarching concerns about— and I'll say it again—oil and gas exploration, for example. Our members, for example, when they read in a general assembly, well, if they want a marine protected area, why don't we put everything close to oil and gas exploration? That's how the members in their houses understand what should be done

So if our government wants to be very clear, you have to meet the leadership of these communities and tell them exactly what the targets are, because the fishermen, with incomprehension, with all due respect, feel targeted.

Mrs. Bernadette Jordan: It was interesting in that we have you, and we had the environmental perspective previously. I would like you to comment on one of the comments made by Dr. Pauly, I believe it was. He said that the use of the environment is only possible if we protect the environment.

Mr. Michel Richard: Yes.

Mrs. Bernadette Jordan: I think that's a very true statement. I'm not saying that your group is not doing so. I think that fishermen are some of our greatest protectors of the fishery. Can you maybe comment on that a little bit?

Mr. Michel Richard: With any fishery we develop, for example, there is always the concern.... It hasn't happened in the recent past, but let's say, for example, an experimental fishery were developed.... Let's go back to 1984 and rock crab. We had special committees of biologists and fisherman formed to work out if the practice or exploitation of that fishery would it have a deleterious impact on habitat. No, it would not, because the traps in the water would be conical ones. Would it have a negative impact on other fisheries? As I explained earlier with the lobster fishery, there would be escape vents

We're looking, once again, at the following issue. I'll go back to the fourth paragraph in my presentation, that the focus of this current government is on conservation and protection, but what about the constituents and the conservation and protection of the coastal communities so they can live and thrive with the resource?

(1035)

The Vice-Chair (Mr. Robert Sopuck): Thank you.

Your time is up. We actually went over time.

It was most interesting testimony. I just hate to cut people off.

Mr. Arnold, you have five minutes.

Mr. Mel Arnold: Thank you, Mr. Chair.

I guess I would be interested in hearing from both of you if there need to be different levels of marine protection that could still be considered MPAs. Can we permit certain uses within so-called MPAs to continue if the impact is low or negligible on the conservation targets, or do we need complete preservation within an MPA for it to be considered an MPA? Should we have those different levels?

Mr. Michel Richard: Once again I'll give you the perspective of our membership when we talked about this a year and a half ago, because, at the MFU, part of our work as the representatives is to see smoke coming and then warn our members.

We're going to have to work on these issues, and a lot of fishermen were saying, "Okay, if a marine protected area means that I could still set my lobster trap, we must be certain that it can be classified as such". I would refer to the marine protected area of Basin Head where a fisherman from P.E.I. told me—although I was not their representative—that that area evolved in a certain way with added protections, but not to the communities in question. I'll leave you with that.

Mr. Mel Arnold: Mr. Martin, do you have a response on that, on different levels of classifications that could still be called MPAs?

Mr. Alan Martin: Yes, and certainly the IUCN has different levels of classification with different levels of protection. The fundamental point is that the levels of protection should be appropriate to the outcome you are trying to achieve, both from a biological perspective and, as Mr. Richard said, from a community and economic perspective as well.

Mr. Mel Arnold: We're hearing a lot about the consultation process. To go into a little bit of the specifics around that, can each of you elaborate on what you see as the value of having all of the stakeholders in the same room at the same time versus the individual lobbying that takes place? What are your experiences that way, and what do you usually see as the best outcome?

Mr. Michel Richard: In the last few years, I haven't seen many government managers or workers who want to meet large groups of fishermen. That has not been happening, whereas we're saying that we're giving you an opportunity to work with the processes and the leadership within the organizations. We can organize smaller-scale meetings where less potentially chaotic discussions can happen. The thing is that there has to be more of a feeling of intendancy or stewardship on the part of community members.

Mr. Mel Arnold: What about having other stakeholders in the room?

● (1040)

Mr. Michel Richard: Yes, certainly, but with first nations, for example, we're being told that they are consulted, but when we talk with first nations, which we do, they are saying they're not being consulted. There is some fine tuning that can be done there.

With local members, for example, we're very strong and very proud of the concept of community with our membership at the MFU and if the local communities, let's say the local shopkeeper or the boat builder or the gas station attendants, want to be at those meetings, fine. They understand the relationship within the community.

Mr. Mel Arnold: Okay, Mr. Martin, on your west coast experience—

Mr. Alan Martin: I think local communities and different sectors have information they can contribute, and in order to have social support they need to be part of the process. It has to be transparent and they have to be clear on what the available options are and be able to provide their preferences to the decision-maker.

The Vice-Chair (Mr. Robert Sopuck): I'm afraid the time is up.

Mr. McDonald, for five minutes.

Mr. Ken McDonald (Avalon, Lib.): Thank you, Mr. Chair.

Thank you to our guests.

I'll probably be fairly quick.

Mr. Richard, you mentioned the consultation process and the fact that there was very little or no consultation leading up to it, but in the same statement you said these agreements—and we've heard them—were signed in 2010 and, as you said, they were left dormant with no activity, nothing happening. After signing a commitment to meet a target by 2020, there was nothing done for five years.

Now that process has started. As you've said, the tomb was opened and the paperwork was dusted off and this is something we should move on because it was an agreement that was signed to meet these targets. Part to the consultation process would be to meet with groups or individuals and it may not be the group or individual whom somebody knows who was consulted or whatever, and the fact that even you're here today as a witness is part of that consultation, and we would hope that would continue.

Going forward—and both of you can probably answer this to some degree—if an area gets assigned as an MPA and everyone knows what the rules are, do you think there's enough monitoring or enough enforcement in place for us to be able to enforce what can and can't take place in that area? It's great to say, meet the targets, but at the end of the day, if we meet the targets, can we do the proper management, the proper monitoring of those areas, and the proper enforcement to make sure things that are allowed to happen are happening, and the things that are not allowed to happen, don't happen?

Mr. Michel Richard: If I may, a large part of our membership decries the fact that there is a lack of supervision of illicit activities. I'm not saying they are everywhere, but that's the crux of one of the problems as well.

The public forum or policy is going ahead, but the logistics will probably be very questionable because, for example, there are local problems, be they in Nova Scotia or New Brunswick, with the electric cable projects and the zoning of these areas. We're having trouble coordinating with DFO to protect our fishermen.

So yes, I would say in response to your question/comment, this is going to be asked by our fishermen. If we're going to participate in this, you have to assure us that what we're protecting is going to be protected by the protectors.

There's a Latin expression, quis custodiet ipsos custodes. Who will watch the watchmen?

Mr. Ken McDonald: Mr. Martin.

Mr. Alan Martin: Monitoring and enforcement are components that need to be used with MPAs, and that social support for the system would rapidly erode if the rules weren't being followed. As with any other rule, monitoring and enforcement are critical to maintaining social support.

● (1045)

The Vice-Chair (Mr. Robert Sopuck): This does end our meeting at 10:45.

I trust that the translators got that Latin.

Voices: Oh, oh!

The Vice-Chair (Mr. Robert Sopuck): We expect to see that in the blues.

Voices: Oh, oh!

The Vice-Chair (Mr. Robert Sopuck): I would like to thank our witnesses for extremely well thought out and professional testimony. The previous two witnesses, again, were very concise, and provided very useful testimony.

I hope that you saw our committee operating in a very collegial manner. We're very non-partisan. We're all pulling in the same direction on behalf of the things you are all concerned about. We're concerned about the same things.

Thank you for some very expert and helpful testimony.

I declare the meeting adjourned.

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