



The Scottish Parliament  
Pàrlamaid na h-Alba

## Official Report

# RURAL AFFAIRS, CLIMATE CHANGE AND ENVIRONMENT COMMITTEE

Wednesday 9 January 2013

Session 4

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**Wednesday 9 January 2013**

**CONTENTS**

	<b>Col.</b>
<b>INTERESTS</b> .....	1567
<b>DECISION ON TAKING BUSINESS IN PRIVATE</b> .....	1568
<b>AQUACULTURE AND FISHERIES (SCOTLAND) BILL: STAGE 1</b> .....	1569

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**RURAL AFFAIRS, CLIMATE CHANGE AND ENVIRONMENT COMMITTEE**  
**1<sup>st</sup> Meeting 2013, Session 4**

**CONVENER**

\*Rob Gibson (Caithness, Sutherland and Ross) (SNP)

**DEPUTY CONVENER**

\*Graeme Dey (Angus South) (SNP)

**COMMITTEE MEMBERS**

\*Jayne Baxter (Mid Scotland and Fife) (Lab)

\*Claudia Beamish (South Scotland) (Lab)

\*Nigel Don (Angus North and Mearns) (SNP)

\*Alex Fergusson (Galloway and West Dumfries) (Con)

\*Jim Hume (South Scotland) (LD)

Richard Lyle (Central Scotland) (SNP)

Angus MacDonald (Falkirk East) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Lindsay Anderson (Scottish Government)

Willie Cowan (Scottish Government)

Gil Paterson (Clydebank and Milngavie) (SNP) (Committee Substitute)

Paul Wheelhouse (Minister for Environment and Climate Change)

**CLERK TO THE COMMITTEE**

Lynn Tullis

**LOCATION**

Committee Room 1



**Scottish Parliament**  
**Rural Affairs, Climate Change  
and Environment Committee**

*Wednesday 9 January 2013*

[The Convener *opened the meeting at 10:02*]

**Interests**

**The Convener (Rob Gibson):** Good morning, everybody, and welcome to the first meeting in 2013 of the Rural Affairs, Climate Change and Environment Committee. I wish everyone—including our large audience—a happy new year. I hope that everyone enjoyed a good break and got over colds and flu and so on.

Members and the public should switch off their mobile phones now—they should not be left in flight mode or anything like that, as they interfere with the sound system.

I have received apologies from Angus MacDonald and Dick Lyle. I welcome Gil Paterson, who is attending the meeting as a substitute, and ask him to declare any relevant interests that he may have.

**Gil Paterson (Clydebank and Milngavie) (SNP):** I refer the committee to my entry in the register of members' interests. I have nothing to add to what is declared there.

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

At around 12 o'clock, should the meeting still be continuing, I will have to hand over to the deputy convener, Graeme Dey, as I have to be absent.

**Decision on Taking Business in  
Private**

**The Convener:** Agenda item 1 is a decision on taking in private item 3, which is on a European Union document. Do we agree to discuss it in private?

**Members indicated agreement.**

**The Convener:** We also need to decide whether to take in private at our next meeting consideration of the European Commission's work programme and EU priorities; the Standards, Procedures and Public Appointments Committee's inquiries into post-legislative scrutiny and Scottish Law Commission bills; our approach to the scrutiny of the Scottish Government's second report on proposals and policies that is required by the Climate Change (Scotland) Act 2009; and our work programme. Do we agree to deal with those items in private?

**Members indicated agreement.**

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

## Aquaculture and Fisheries (Scotland) Bill: Stage 1

10:05

**The Convener:** Agenda item 2 is our final evidence session on the bill. We will hear from the minister on all aspects of the bill—when I say all, it means just about that. I welcome the Minister for Environment and Climate Change, Paul Wheelhouse—good morning.

**The Minister for Environment and Climate Change (Paul Wheelhouse):** Good morning, convener.

**The Convener:** I welcome from the Scottish Government Willie Cowan, deputy director of performance, aquaculture and recreational fisheries, and Lindsay Anderson, solicitor, head of branch. Good morning to you.

I do not suppose that the minister particularly wants to say anything in introduction.

**Paul Wheelhouse:** If you do not mind, I would like to make a short statement.

**The Convener:** Okay.

**Paul Wheelhouse:** I appreciate that you are busy and I do not want to take too much of your time, but an introduction would help to set the scene.

Thank you for the opportunity to reiterate the Government's thinking behind the bill and to begin to respond to issues that arose in the written and oral evidence that the committee received before the festive break. It is important to acknowledge that the bill's primary purpose is to ensure that farmed and wild fisheries—and their interactions with each other—continue to be managed effectively, maximising their combined contribution to supporting sustainable economic growth while still giving due regard to the wider marine environment.

That significant statement of intent was crafted in the knowledge that the range of stakeholders are not often in agreement—more often, their views differ. Reaching some consensus among the many and varied environmental, animal protection, business, sporting and other interests presents many challenges, but I am optimistic that we now have a number of effective platforms to enable us to move forward.

The Scottish Government supports the aquaculture industry in its ambitious targets for growth by 2020. Members will be aware that we said in the policy memorandum that the targets translate to a 50 per cent increase, against a 2009 baseline, in marine fin-fish production. As of today,

that equates to a 32 per cent increase. For shellfish production and particularly mussels, the target is a 100 per cent increase from the baseline.

I will put those figures in context. From 2005 to 2011, the value of aquaculture doubled—it grew from £289 million to £585 million, so it was up 102 per cent. The farm-gate value of the aquaculture sector—that means salmon, trout and shellfish—was £609 million in Scotland in 2011. That was a 9 per cent increase on the value in 2010, which was £563 million. Those figures are clearly important, but I must emphasise that the bill is not a blueprint for assured growth; rather, it is designed to ensure that there is an effective and proportionate regulatory framework in place that facilitates sustainable growth while taking account of the needs and concerns of all who use Scotland's marine environment.

We recognise that, for sustainable growth, it is essential to have in place an effective regulatory framework that safeguards the interests of the wider marine environment and those who benefit from it. To that end, the bill aligns well with the overarching aims, by providing new legal measures for fish-farm operators; moves to improve the management and governance of district salmon fishery boards; safeguards for the shellfish industry, with measures to ensure that shellfish waters continue to be protected from pollution after the EU shellfish waters directive is repealed this year; powers to impose charges; and additional enforcement powers to support sea fisheries officers.

The bill represents the first step in our commitment to modernising and improving arrangements for the management of Scotland's salmon and freshwater fisheries. It takes forward our policy objectives through provisions to secure good governance by district salmon fishery boards and enhanced management of salmon and freshwater fisheries. My officials are undertaking further work to consider the most appropriate governance structures and responsibilities to complement the bill. We would be happy to say more about that, if that was helpful.

Not everything requires primary legislation. We will take forward work on additional areas outwith primary legislation, which includes using existing powers in the Aquaculture and Fisheries (Scotland) Act 2007 or using voluntary means whenever possible. Members will be aware of the recent initiative by the Scottish Salmon Producers' Organisation on sea lice reporting, following discussions with the Association of Salmon Fishery Boards, which the SSPO considers will provide much greater understanding of that aspect of fish health management in areas where salmon farms and wild salmon runs coexist. The Scottish

Government greatly welcomes that development and supports its aims. Like many others, we will watch it closely to ensure that it is fit for purpose. If it is not, we will act appropriately. Of course, we retain the ability to progress secondary legislation if the need arises, but our presumption is not to legislate unless absolutely necessary.

The bill establishes a framework within which growth can take place sustainably. Through the bill, we seek to ensure that the marine environment is protected while we realise the benefits of a successful and growing aquaculture industry that develops side-by-side with the wild salmon and recreational fisheries in Scotland.

I have already advised the committee of amendments that I intend to lodge at stage 2 in relation to cockle fishing in the Solway Firth, and I anticipate a number of others. We have already received suggestions from stakeholders, including the SSPO and the ASFB, and we are considering the extent to which those suggestions would be of benefit. However, at this stage, the proposals are not firmed up enough to allow me to say more.

On that and on any other aspect of the bill, I am happy to answer questions from the committee as best I can.

**The Convener:** I think that I am now the only member of the committee who was involved in the committee stages of the 2007 act. What assessment have you made of the success of the 2007 act? For example, how well is the industry complying with the code of good practice?

**Paul Wheelhouse:** One reason why we do not propose at this time to introduce additional legislation on, for example, sea lice data monitoring—which I am sure we will come on to—is that we believe that there is scope for voluntary action on that front. It is certainly important that we allow for that before we legislate, and we feel that the sector is making progress in many respects. The number of escapes has reduced and adoption of improved netting and various other technological advances has increased.

We believe that the 2007 act has set a good foundation on which we can build. It is part of the suite of legislation that will cover the interests that I described in my opening statement. However, we feel that action is required in some areas. Although, under the code of good practice, the take-up of farm management agreements or, alternatively, farm management statements is good—we estimate that 98 per cent of areas are covered—that still leaves a gap, which means that we need additional provisions to ensure that the whole of Scotland is covered.

With your permission, convener, I ask Willie Cowan, who has been in his role for longer than I

have been in mine, to comment on his perception of how the 2007 act has been implemented.

**Willie Cowan (Scottish Government):** The 2007 act has been implemented and the management regimes undertaken by the fish health inspectorate are working well. As the committee will be aware, the code of good practice is a substantial document, running to more than 100 pages, that was prepared by a committee on behalf of the industry. It includes guidance on statutory responsibilities, but probably has more guidance on the day-to-day operational responsibilities of running a fish farm. The code of good practice is independently audited. I believe that, across the industry, the compliance rate with the code is in excess of 90 per cent, although I will get back to the committee to confirm that.

**The Convener:** From what the minister said in his introduction, the Government continues to maintain the approach of encouraging voluntary action where possible. Given that Mr Cowan has just suggested that there is a high rate of compliance with the code of good practice, why have you decided to give it statutory underpinning in the bill?

**Paul Wheelhouse:** My understanding on the code of good practice is that, on some issues, such as FMAs and farm management statements, we need to include provisions in the 2007 act to ensure that there is 100 per cent coverage of Scotland. Also, we need to future proof the sector, because new operators might spring up across Scotland. The growth that we expect in the sector could involve existing companies, but new operators could also come on board and they could have a different view from others. Shellfish production is expected to increase, too, so it is important that we have 100 per cent coverage and that we have that degree of collaboration and information sharing across the sector through the FMAs.

We want to avoid the situation whereby the code of good practice becomes the property of Government and is given statutory force in its entirety, because that would mean that we would have to come back to the committee constantly for on-going revisions. It is better that we leave it to industry and science to develop approaches but that we set the framework in which the code of good practice sits. We have covered specific issues such as the provision of FMAs and FMSs by setting up a relationship between the regulatory framework and the code of good practice.

10:15

**The Convener:** I will bring in Jim Hume next because he has a question that relates to how the code is applied and to the environmental

pressures, which is quite important in understanding the background to the new legislation.

**Jim Hume (South Scotland) (LD):** Good morning and happy new year. An important point that has been covered in our discussions with stakeholders on all sides is the need to balance any environmental impacts with the need for an aquaculture industry that is competitive. How does the Scottish Government's approach balance those needs?

**Paul Wheelhouse:** That is an important part of the reason for the legislation. Obviously a number of interests sometimes butt against each other and a degree of tension arises because of that—between wild fisheries and fin-fish farming and also in other areas of the sector such as sport fishing.

We have a duty to consider the interests of all those groups; the essence of our role is to strike a balance. We need to allow the sector to grow and not constrain it, as long as it is complying with environmental directives and regulations. We need to ensure that it is doing a responsible job of delivering economic activity in fragile parts of Scotland's economy but doing so in a way that pays adequate regard to safeguarding the local environment. We should facilitate that.

On one of my recent visits to the committee, we talked about the balance of work that we are doing and about trying to facilitate sustainable growth through our budget. We are continuing that approach through our regulatory engagement with sectors across Scotland, to ensure that we allow them to grow but in a way that is sustainable for the longer term. Probably only Government could fulfil the role of balancing the interests, because historically there have been tensions between some of the different partners around the table.

On all sides, there has been a good degree of progress on engaging in the discussions around the bill and I am confident that, once the bill—I hope—progresses through Parliament, structures such as the ministerial group on aquaculture will allow that dialogue to continue and will help with implementation of the bill. The interaction stream of that ministerial group on aquaculture will allow the different, sometimes competing, interests to be worked through, and can cover the joint development of technical standards and understanding what netting, seal deterrent devices and various other things are needed. More importantly, the group will look at capacity to see what level of sustainable growth we can expect in the sector in Scotland, taking into account the different interests. Balancing those interests and taking an overview of what is required is an important role for any Government to play in such a situation.

**Jim Hume:** There is a perception that I am sure is true—Marine Harvest mentioned it in evidence, as did Professor Thomas, I think—that the aquaculture industry is quite heavily audited. Is the Government able to gather and analyse all the data from the various bodies that those audits generate and, through that, look at ways to avoid duplication of information gathering in the future to get a more streamlined bureaucracy rather than piles and piles of red tape?

**Paul Wheelhouse:** I am aware that the United Kingdom Government has a bonfire of regulation going on. In Scotland, we are taking a slightly different approach. We are trying to focus on ensuring that the regulation that exists is better. It is a case of not necessarily ditching regulation but ensuring that there is clarity around it—that it is easier to follow and easier to comply with. As I have said to the committee before in respect of the roles of agencies such as the Scottish Environment Protection Agency, Scottish Natural Heritage and, indeed, Marine Scotland, it is about trying to ensure compliance rather than punishing failure. It is about trying to help businesses to comply.

Putting the regulatory framework in place, through the bill, will be an important step in enabling a level playing field across the various sectors that the bill covers and in enabling a greater degree of clarity about roles and responsibilities. However, if the committee requires more information about what audit is already taking place and what impact the bill will have on that, I am happy to come back to the committee with our assessment in that regard.

**Jim Hume:** On the issue of audited information, is all of that available to the Government or is some of it perhaps not available?

**Paul Wheelhouse:** Outwith the bill, on the issue of sea lice data—which is a key area that I am sure we will come back to, perhaps extensively—we are looking for voluntary action from the sector to enable us to interact with the industry to bear down on that problem.

I will ask my colleague Willie Cowan to respond on the availability of information.

**Willie Cowan:** We do not have routine access to the audits of the industry that are undertaken outwith Government, such as by the supermarket suppliers and so on, but there is no reason why we should not get them. We are in continuing discussions with the industry about the best way of utilising all the audit information that is available so that we have a complete picture of compliance levels across the industry. That is something that we want to look at.

In addition, on the regulatory side, we are in discussions with all the Government agencies that



have an interest in the industry to ensure that we collectively manage and enforce the regulation of the industry at an appropriate level. We want both to reduce duplication where it happens and to increase efficiency across all our operations. For all sorts of reasons, we are very interested in pursuing that issue.

**Claudia Beamish (South Scotland) (Lab):**

Good morning, minister, and happy new year. Can I take you back to the 50 per cent target? In your opening remarks, you focused on the fact that due regard must be taken of the wider marine environment. As you will know, the Scottish Wildlife Trust asked what modelling was done of the carrying capacity of the marine environment before the 50 per cent target was adopted. The SWT also highlighted concerns that the target was set before the final marine plan was in existence, although we all know that the plan has gone through many of its stages. Are you content that the provisions in the bill are sufficient to deal with the 50 per cent increase in fish-farming activity? What analysis has been carried out of the environmental impacts of a 50 per cent increase in such activity?

**Paul Wheelhouse:** On the 50 per cent target—it will be 32 per cent from the current point according to the latest data—SEPA has helped to develop tools such as autoDEPOMOD, which I mentioned at a previous committee meeting, to enhance our modelling capability. Certainly from this point forward, if I may start with that, we have the modelling capability to understand what impact particular site applications around Scotland might have on the biomass level that can be sustained locally, so we are certainly in a much better place now to understand what impact any application will have on the local environment. I hope that that gives some confidence to the Scottish Wildlife Trust and others that we at least have the analytical ability to understand what the impact would be.

I might ask Willie Cowan to respond to the question about interaction with the marine plan.

My understanding of the position now is that, although perhaps not in the format that the industry would like, we have sufficient consents granted for us to have, broadly speaking, the increase of 50 per cent from the initial date, which would be a 32 per cent increase from now. The problem is that many of those consents are in places where perhaps the industry would not want them any more or are for sites that might be too small in scale to meet modern standards, economies of scale and so forth. Obviously, the Scottish Environment Protection Agency, as one of the regulators, would look at any revised proposals, for example to have a site somewhere else or to amalgamate consents. However, the

consents have been granted, and if they were all taken up, we would probably get to the figure that has been referred to. Some of the consents are historical, in that they were granted some time ago and are renewed on the usual cycle. Whenever they come up for renewal or an alternative is proposed, the Government, through SEPA, is able to assess their impact on the local environment.

I ask Willie Cowan to address the point about Marine Scotland and the interactions with the marine plan.

**Willie Cowan:** One of the purposes of the marine plan is to be aspirational across the types of activity that might take place in the environment. The pre-consultation draft marine plan supported the targets that the minister has outlined. The forthcoming draft, which is due out in the summer, will continue to support those aspirations.

Certainly on the fin-fish side, the aspirations are for about a 4 per cent increase in production year on year, which is maybe the equivalent of three or four new farms a year across the whole of Scotland. The west coast and the islands are therefore not being blanketed with fish farms; the increase is incremental. The existing regulatory framework and the bill, along with the research and the modelling improvements that the minister touched on, help us to work towards the target incrementally. However, as the minister said in his opening statement, the bill is not indicating what will happen; it is saying that what is proposed will provide us with a framework to get there incrementally, if the environmental sustainability, through the modelling, the discharge consents and all the rest of it enable it to happen.

Clearly, one of the things that we want to do is to move beyond considering fish farms on a site-by-site basis to perhaps consider them on a water-body basis and, indeed, across Scotland. We have a considerable amount of research on the go just now and are improving modelling capacity to enable us to be better at managing existing sites and giving consent to new sites.

The existing framework and what we have put before the committee today are therefore about providing a framework that will allow us to get there incrementally, if the environmental considerations are met.

**Paul Wheelhouse:** I will just add a brief point to that. I referred earlier to the ministerial group on aquaculture. The capacity strand of that, which I referred to earlier, will specifically involve looking at the sector's ability to deliver the target in a sustainable way. Obviously, the likes of Scottish Environment LINK will be represented on the group, so I trust that people's legitimate environmental concerns about growth in sensitive environments will be taken into account when

advice to ministers on the sector's ability to grow and on the planning and regulatory issues that need to be resolved in that respect is considered.

**The Convener:** Thank you. We move on to a couple of environmental issues relating to aquaculture that are not covered by the bill.

**Alex Fergusson (Galloway and West Dumfries) (Con):** Good morning, gentlemen. I, too, wish you a happy new year.

As the minister said, we were inevitably going to come on to the issue of sea lice at some stage, and this seems to be as good a time as any. I find it difficult to talk about the biomass increase that is obviously related to the increase in aquaculture output without mentioning the subject of sea lice. I am sure that the minister is aware of the study of the Norwegian aquaculture industry by Jansen et al, which was published fairly recently and which concludes that there is a real relationship between local fish density and lice infection pressure.

One of the things that struck me, which relates to a lot of the evidence that we have been given, was that the analysis was possible only because the Norwegians insist on farm-by-farm data collection on sea lice. That brings me back to what the minister—or it might have been Mr Cowan—said about our having the analytical ability to deal with the biomass increase. Why does the Scottish Government seem so reluctant to go down the route of farm-by-farm data collection on sea lice? We have had a lot of conflicting evidence on the issue and I have not made up my mind on it yet.

10:30

**Paul Wheelhouse:** It is not that farm-by-farm data on sea lice are not being collected; the issue is more to do with publication. We have tried to take an approach that strikes a balance between respecting and giving due regard to commercial sensitivities and allowing us, through the Scottish Environment Protection Agency and fish health staff, to have access to the data, so that where the proposed granularity of data might not allow an individual site's performance in relation to sea lice to be seen, we will—I hope—have access to that information.

The issue has been part of our discussions about the voluntary arrangements that the sector offered in its letter to the convener. There is a certain granularity in relation to publication, but we would have access to data, so that we could understand where sea lice were found locally.

I appreciate that that is not the same thing as allowing the data to be used for research. However, I stress that a strand of the ministerial group on aquaculture's work will be about identifying gaps in the research and trying to

increase collaboration between the academic community, the industry and people who are involved in commercial research. I hope and expect the MGA to work to ensure that gaps are filled, by prioritising research in areas in which we need information.

An interesting point about the study to which you referred and the work of the University of St Andrews in the area is that the data come largely from Norway and Ireland. We realise that we do not have a comparable study in Scotland, and I look to the MGA to consider what we can do to fill that significant gap. We need to work with the industry to find a mechanism by which we can build on the data that are collected at farm-by-farm level, for research purposes. It is important that the industry is involved with the MGA's research strand so that it can facilitate such research.

I hope that my answer was helpful. Willie Cowan might want to add something.

**Willie Cowan:** There is a question about what the data would be published for. Ministers are seeking to take an approach that provides reassurance to the public about the aquaculture industry's performance on sea lice over what are now 30 areas.

Individual fish farms and farm areas are already interacting with local fishery managers—that is happening, and we expect the situation to improve. Local farm managers have had access to the data and we expect them to have access to them in future. Data are available at two levels: in relation to public reassurance, and in relation to the management of fisheries at the local level, so there is real interaction between farmers and local fish managers on the detail, farm by farm. That has been the approach so far.

**Alex Fergusson:** Thank you. Sorry, minister, you were quite right: I should have said that the issue is the publication of farm-by-farm sea lice data. We received a great deal of evidence on that.

I think that I am right in saying that, under the Aquaculture and Fisheries (Scotland) Act 2007, the Scottish ministers have the power to require fish farmers to provide them with individual farm data. Would those powers also allow for publication of the data in certain circumstances?

**Paul Wheelhouse:** I will check with Willie Cowan, but my understanding is that we have powers under the 2007 act to require the data to be collected, and we could publish that information.

**Willie Cowan:** If there were a statutory order requiring the collection of the data, by extension, the data would have to be published. The freedom of information regime makes that inevitable.

**Alex Fergusson:** Has that power ever been used?

**Paul Wheelhouse:** No, not to date. As I say, we have legislation that gives us an enabling power and we could develop a proposal for secondary legislation. However, we are trying to work with the industry, recognising some of the legitimate concerns that it has while ensuring that the wider interests have confidence that the tier of data that Willie Cowan referred to will enable them to see at a glance whether there is a problem and trust that the regulators, such as SEPA and the fish health inspectors, are doing that work at the lower level of granularity and are looking at what is actually happening on the ground. As Willie Cowan said, that is why we are including in the bill the requirement to increase the coverage of farm management agreements across Scotland. That will ensure that there is the required degree of collaboration and information sharing, which means that, if there is a sea lice problem in one part of a catchment, the other operators are aware of it and are discussing the issues and collaborating to reduce the impact on the sector and wider marine environmental interests.

**Nigel Don (Angus North and Mearns) (SNP):** A representative from SEPA told us that SEPA licenses the biomass of a fish farm but that Marine Scotland licenses the level of medicine that can be used in relation to that biomass, which means that a fish farm could be licensed to have 1,000 tonnes of biomass but might have protective medicines for only 800 tonnes. Do you and your officials recognise that as an issue? Do you believe that you have powers to deal with it? If not, do you believe that you should?

**Willie Cowan:** It is SEPA, through the controlled activities regulations regime, that specifies the medicines that can be discharged into the environment. If you have planning permission for a 1,000 tonne site, SEPA, through its consenting regime, might say that the medicines that you can use at that site equate to 700 tonnes. It is for the industry to manage matters within those two consents. It is SEPA, not the Scottish Government, that manages the discharge into the marine environment.

**Paul Wheelhouse:** It is important to realise that one of the advantages of having tools such as autoDEPOMOD is that they allow us to better understand what biomass can be sustained. That gives SEPA the information that it needs so that, if there are persistent problems with, for example, particularly high sea lice densities, it can work with the operator to manage down the biomass so that the sea lice problem is kept under control. As I said to Claudia Beamish, the advances in the modelling help us to understand those interactions better and will help Marine Scotland to understand

what medicines might be required and the scale of medicine use that should be allowed.

**Nigel Don:** Do you believe that the bill gives you the necessary powers in that regard? My reading of it is that it does not. I recognise that you are trying to do a lot of things with the industry by consent, which is a good way of running most things on this planet. However, we are interested in whether you have the powers that you might need.

**Paul Wheelhouse:** I ask Willie Cowan to say whether we have those powers, whether in the 2007 act or in other pieces of legislation.

**Willie Cowan:** SEPA already has powers to require a reduction in biomass in relation to managing discharges to the marine environment. We are in discussion with SEPA in relation to biomass reductions for reasons other than those that come under its traditional environmental role. The minister can direct SEPA to undertake certain functions, so we do not need legislation for that. The minister can direct SEPA to reduce biomass under certain conditions that go beyond the powers that it has traditionally used to reduce biomass in relation to managing discharges to the marine environment. We believe that ministers already have the power by direction to do what Mr Don is asking about.

**The Convener:** Could you send us in writing an idea of the conditions that might lead you to ask SEPA to take such action? That might be helpful.

**Willie Cowan:** Yes.

**Paul Wheelhouse:** We are happy to give that undertaking.

**The Convener:** Thank you. I return to the bill's provisions on farm management agreements and statements. What proportion of fish farms are not part of agreements at present?

**Paul Wheelhouse:** I will come back to you to clarify the position if this is incorrect, but my understanding is that fish farms that are not covered by agreements represent only 2 per cent by volume, and the number is in single figures.

**The Convener:** Okay. How will the boundaries for area management agreements be set and changed?

**Paul Wheelhouse:** We continue to believe that the salmon farming industry is best placed to determine the areas and to make decisions for itself. However, the bill provides a backstop for ministers to step in should the system fail and problems be identified. If we feel that important areas are not being covered, the bill will provide us with the ability to step in and make adjustments.

As I said, we welcome the SSPO's proposal to publish sea lice data. Although we will not

necessarily control the areas—unless we have to fill a gap that is identified, using the provision that we have put in the bill—we take the view that the industry will work with us on determining sensible FMAs that work well with the publication of the data.

**The Convener:** It concerns me that, although we are to have marine protected areas and management areas as well, the tripartite working group, which involved wild fish interests in the drawing up of agreements with fish farms, will not be involved in the farm management agreements that are produced under the code of practice. Why will it not be involved?

**Paul Wheelhouse:** With apologies to Willie Cowan, I ask him to deal with that.

**Willie Cowan:** The farm management agreement is essentially an operational agreement. When a consent has been given and a farm management area has been established, operators in the area will be required to have a farm management agreement. It is an operational matter. I am not clear why the group that you refer to would have an interest at that stage.

The expectation is that the industry will liaise with local farm managers on a farm-by-farm basis and, as production cycles complete, there will be a review of what happened in an individual farm. If it is agreed that something else should happen for the following production cycle, that can be reflected in the subsequent farm management agreement. There is scope for day-to-day interaction on particular issues between farmers and local managers, and that interaction can then be reflected in an agreement.

10:45

**Paul Wheelhouse:** As Willie Cowan said, we are trying to encourage the sector to work more at a catchment level—that is, to work more sensibly on areas that are naturally defined by a river and a particular catchment—so that there is a logic to the boundaries. We hope that that will match up better to the wider marine planning environment and areas that are defined elsewhere in legislation. We are trying to get to a point at which, with voluntary action from the industry, a bit of common sense is applied to the areas that the industry defines in consultation with others.

**The Convener:** I hear what you say, but the tripartite working group has a particular role to play. In the interests of clarity and dispelling questions about openness, it would be good if you could give a clearer picture of how the group will work with the farm management agreements and the people who make them.

**Paul Wheelhouse:** If it would be helpful, I would be happy to write to the committee following the meeting with some further thoughts about that and to set out how we think that that process might be improved.

**Claudia Beamish:** I am sorry to go back briefly to sea lice, minister, but, on reflection, I was not clear about your position on some aspects of the matter. Will you clarify what commercial sensitivities or privacy requirements companies would need to have to prevent the publication of farm-by-farm sea lice data? Willie Cowan highlighted the reasons why publication would be necessary, but in evidence to the committee, some organisations have said that publication would be helpful for work with wild salmon fisheries and might help better understanding of how sea lice on a particular farm had been treated and whether that treatment was effective. As in any industry, there may be good working practices and—to be blunt—not-so-good working practices, and publication of farm-by-farm data might open up those practices to public scrutiny.

**Paul Wheelhouse:** Claudia Beamish is correct to identify the need to roll out best practice across the sector. I expect that the interaction strand of the MGA will work to understand the interaction between the wild fisheries interests and the salmon farming industry and consider the degree to which the industry can share information and advise colleagues with wild fisheries interests that there are problems in a locality so that they can work on them together.

I also hope and expect that the research strand of the MGA's work will deliver information sharing and make people aware of which techniques to control sea lice numbers work. Sea lice are a naturally occurring species. They come into fish farms and, potentially, go back out into the wider environment, so we need to understand how we can control that process better.

On commercial sensitivities and the publication of data, the key point is to understand that, because of the nature of the retail market in the UK and elsewhere, there are huge sensitivities about sea lice. In the public discourse about the issue, there is often frenetic debate.

Every fish farm probably has some sea lice—I would be amazed if there was a farm that had none—just as sea lice infest wild salmon irrespective of whether the industry operates in the locality. We need to give operators the opportunity to flag up problems to the industry internally and to the officials who regulate the sector. They will have to publish data that perhaps will not give the degree of granularity that is being suggested but which will enable communication at the necessary level so that we can step in, determine whether

measures are being taken and, if they are not, take regulatory action.

Operators should be given sufficient time to pull themselves round and deal with the problem without the risk of losing an entire company-wide contract on the basis of what has happened at one site. There are sensitivities. If a particular operator has multiple sites, one of which has a sea lice problem, that has the potential to impact on its entire contract with a major retailer, with huge implications for local jobs.

We recognise the genuine public desire to know where problems are happening and that those problems are being tackled. As long as we have confidence that, as a regulator of the sector, we have access to the data and can take appropriate action to ensure that problems are addressed, we feel that the level of granularity that we can work with in relation to publication is sufficient at this stage to give other people confidence that there are no problems, as Willie Cowan said. When no problems are reported across the 30 areas, we can see that that can give confidence to the wider stakeholder community. However, we have access to a better level of granularity, should we need it, to take the appropriate action and give an operator time to turn a site around rather than lose its entire custom. It is not in an operator's interest to sell poor-quality stock to a retailer, and we are confident that that will not happen. It is about giving people time to deal with a sea lice problem as it occurs on a particular site. We can then give people confidence that that problem has been addressed.

Willie Cowan may have views on that.

**Willie Cowan:** There is a difference between the publication of a data set for general knowledge and knowledge of data for local management. As I said, the clear expectation is that, at the local level, the local fish farmer will engage with local fishery managers on the management of particular sites and what is happening in relation to sea lice and treatments. There is an issue to do with what is published for public consumption and what is available for management, which need not necessarily be published for public consumption.

**The Convener:** Okay. To return to farm management agreements, which you are including in the bill, what is the process by which disputes can be resolved if fish farmers fail to agree?

**Paul Wheelhouse:** We have looked at the potential role of arbitration. Obviously, there may be situations—we hope that they do not occur—in which companies cannot agree on the content of a farm management agreement. We believe that independent arbitration would be appropriate at that point. It may also be appropriate when agreements that are in operation are not being

followed or are not achieving their agreed objectives. Obviously, given the nature of the areas concerned, more than one operator might be involved, or there might be dissatisfaction that a particular operator is not fulfilling its obligations, and an independent arbitrator could be brought in to help to resolve the tension. That is where we think things may go. We hope that things do not come to that, but we believe that there is scope to bring that role into play.

**The Convener:** Are you assuming that there will be very few disagreements about farm management agreements?

**Paul Wheelhouse:** I would not like to say that that is an expectation, but I hope that there will be very few disagreements. We expect that, by bringing in a more robust framework for the sector, particularly in areas such as improving technical standards and netting standards and controlling the potential for escapes and various other risks to the sector locally, that will have an impact in dampening down the potential for disagreements. However, I cannot go stronger than that.

My colleague Willie Cowan may have views on the experience to date of the operation of FMAs and how often there have been such tensions. Perhaps he can help.

**Willie Cowan:** I do not have the numbers. Part of the SSPO's role is to mediate between companies if such issues arise. We are talking about 98 per cent of volume being produced by SSPO members, who are all signed up to the same code of practice. The expectation is that there should not be many areas in which there is a disagreement that is not resolvable.

**The Convener:** We are aware that such agreements are published and available in the code of good practice audit and the Marine Scotland Science fish health inspectorate inspections.

Can a third party object to an agreement? If so, what happens if objections are raised?

**Paul Wheelhouse:** In the interests of brevity I direct that to Willie Cowan.

**Willie Cowan:** No, third parties cannot object. The farm management agreement is a matter for the operators in a particular area. It takes account of their statutory and code of practice responsibilities. It is an operational agreement and there is no scope for any official complaints regime to enable someone outwith the companies concerned to have an input.

**The Convener:** Thank you. Are members all right on those points?

**Alex Fergusson:** I have a brief supplementary. It has been suggested to us in supplementary

evidence from Professor Brian Austin, director of the institute of aquaculture at the University of Stirling, that in some respects the agreements are not flexible enough to allow for a rapid response in any given changing situation. Will you comment on that?

Professor Austin also suggested that to be fully functional, it would be better if FMAs and FMSs applied to all aquaculture across Scotland. What are your views on that criticism?

**Paul Wheelhouse:** On the latter point, although Willie Cowan is quite correct that 98 per cent of the salmon farming industry is covered by the SSPO, clearly we are trying to encourage through the bill's provisions the universal coverage of such interests in Scotland under FMAs.

Can you remind me of your first point?

**Alex Fergusson:** The agreements are perhaps not flexible enough to allow for a rapid response in any given emergency situation. The suggestion is that a little more flexibility should be introduced through the bill.

**Paul Wheelhouse:** Unless Willie Cowan has any particular view, we could perhaps write to the committee about how we might work through the likes of the ministerial group on aquaculture to encourage that issue to be taken on board by the sector so that, when they are developed, local agreements build in some flexibility, or at least make provision for unexpected circumstances. Willie Cowan may have something to add to that.

**Willie Cowan:** I am not sure that I agree with the point. Under the bill, the farm management area is there to bring in a minimum set of standards that the Government believes needs to be taken account of. In operational terms, it will do nothing to restrict individual farms or farmers in an area taking immediate action to resolve a specific emergency issue. There is nothing in the bill to restrict that type of action.

**Alex Fergusson:** Right—that is fine.

**Paul Wheelhouse:** I know that you are conscious of time, convener, but I want briefly to add that we are taking a conscious decision in that regard. We recognise that such agreements are best developed by the sector itself. We do not want to get into the business of the Government micromanaging what happens with the FMAs at the local level, but we can certainly ask the industry, through the likes of the MGA, to reflect on such issues. Willie Cowan makes very valid points.

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

I hope that the next section, on tagging farmed fish and tracing escapes, will be slightly more straightforward.

**Gil Paterson:** I am a former angler—and not a very good one, at that. When I was an angler the chats were always about this particular issue, which I know is high up the agenda for the sports fishermen's chattering classes. How will the approach that is taken in the bill improve the tracing of the source of escapes of farmed fish?

**Paul Wheelhouse:** In the informal discussions that I have had with the local fisheries board managers, there seems to be strong support for and confidence in traceability. Tracing provides the opportunity to better understand what activity is taking place, but it provides confidence to consumers, too. Obviously, we are not talking about fish necessarily being sold. An angler will catch a fish and, if they do not release it, it will be for personal consumption rather than for sale. Tracing provides a better understanding of where fish have escaped from and who is catching them.

11:00

**Willie Cowan:** The key issue is that inspectors are allowed to take a sample only where they know that there has been an escape. Under the bill, if farm fish are found in a water body but there has been no report of an escape, inspectors would be able to go to the farms within that water body and take a sample to identify where the fish in the wild environment had come from. At the moment, action is quite restricted—we can do something only if we know that there has been an escape.

**Gil Paterson:** In evidence to the committee, the Atlantic Salmon Trust suggested that farmed fish should be tagged. What is the Government's view on that? Should farm fish be tagged or marked in some way to serve the same purpose?

**Paul Wheelhouse:** First, you must understand whether there is a problem of significant scale. The ability to genetically test fish in a fish farm so that we understand whether they match up with fish that are being found in the wild environment is important. From a practical point of view, if we have large concentrations of fish, that might be difficult and not the easiest thing to implement. I know that sampling is done for health reasons and fish can be inspected in the channels that they go through to see whether they have any visible signs of disease.

I do not know whether Willie Cowan has had any discussions with industry about that proposal.

**Willie Cowan:** As the minister says, from a purely practical point of view, we could be talking about hundreds of millions of individual fish. To date, tagging has simply not been practicable, from either a practical or a technological point of view. As ever, technology moves on and investigations are going on in other parts of the world, which suggests that other people are

looking at that as a possibility. Whether tagging ever becomes practicable is a different issue. However, technology advances and some of the genetics firms are looking at farmed fish that simply will not attract lice and at the possibility of a triploid farmed fish that is sterile and cannot breed. There are a whole range of issues relating to managing the interactions with the wild environment and the potential mitigation of escapes. Tagging is one measure, but there are others and there will continue to be developments.

**Jim Hume:** Willie Cowan mentioned triploids, which I believe are widely used at rainbow trout fish farms. Is there a technical reason why that has not been the case with salmon fish in aquaculture?

**Paul Wheelhouse:** We will perhaps need to write to the committee with a response on the science behind that.

**Willie Cowan:** We know that the industry is looking at all aspects of production and how to mitigate potential impacts. Triploids are being looked at and we can certainly write to the committee with a scientific and technological update about them.

**The Convener:** We move on to training and the use of fish-farm equipment, on which Nigel Don has a question.

**Nigel Don:** As you know, section 3 effectively and for various reasons gives the Government a power to define technical requirements for certain pieces of equipment. However, the industry has told the committee that most escapes are perhaps the consequence of human error rather than anything to do with equipment. Should the bill contain a requirement for training? Obviously training is a good thing but should it be verifiable?

**Paul Wheelhouse:** It is a fair question. The fact is that there is variation in the sector. Not all operators are in a uniform place with regard to adopting technical standards or addressing the supporting human resource aspects to ensure that their staff are trained. At the other end of the spectrum, certain operators might not be in a great place with regard to moving forward with the kind of technological measures that we might expect the industry itself to develop.

There could come a time when training might become an issue but it would be difficult for us to specify that at this stage. It is up to the industry to determine its requirements, but we can certainly consider human resource implications through the MGA's technical standards strand. I am absolutely certain that the situation will vary from one company to the next, because I know some operators that are well ahead of the curve in their early adoption of technology to try to reduce escapes, and of techniques for improving much

more capital intensive or at least technical aspects such as fish health, recirculation and so on, and others that are in a more difficult position.

I am aware of the concerns that many of the issues are down to human error. From my discussions with some of the key figures in the industry, I know that when we looked at the issues that might come up they said, "Well, that shouldn't be happening in our company. If someone commits a particular offence, it would be a disciplinary matter." They would say that it is less a corporate issue than a matter of a member of staff failing to deliver what is expected of them.

I ask Willie Cowan to comment on whether there have been any discussions about training requirements in the technical standards strand.

**Willie Cowan:** Not as such. However, I would suggest that, in the past couple of decades, the industry has moved on in leaps and bounds and has become very advanced. It has apprenticeships and training programmes that cover people from the lowest level—deckhand labourers, say—up to farm managers. The infrastructure exists in these companies, which are major international players.

That said, we must appreciate the environment within which some of the operations take place. We are not talking about clinical laboratories. It does not matter whether someone is trained to a gold standard; if they slip and something happens, that is what happens.

**Nigel Don:** The former factory engineer in me feels the need to disagree slightly with you. Yes, if someone slips, they slip; however, the consequences of such a slip can be mitigated if the possibility of its happening has been thought about beforehand. It will not happen, of course, but the net result of that slip might be that a net's worth of fish is lost. I am partly hoping that you can reassure me that we are pushing the industry in the direction of considering problems beforehand to ensure that other huge problems do not emerge.

**Paul Wheelhouse:** I fully accept the point, but we have to remember that technical standards are being developed and adopted in the context of the wider regulatory framework. If a breach—if you like—or failure to maintain its operations within the expected technical standards leads to a company breaching the regulations and therefore puts it at risk of a fixed-penalty notice, the prospect of that kind of financial impact will provide an incentive for it to ensure that its staff are trained. The issue should not be seen in isolation; it is part of the wider regulatory framework.

I totally accept your point that we should not just accept that things happen and say that that is the end of it. If an issue is serious, it should be seen

as leading to a company putting itself at risk of receiving a fixed-penalty notice or a more severe sanction. That should be remembered. We have the ability to engage with companies through our regulatory function; we can say, "This isn't good enough—we need to see a concerted effort to ensure that escapes do not happen."

**The Convener:** We move on to another area where things can happen—on wellboats.

**Graeme Dey (Angus South) (SNP):** Good morning, minister. SEPA suggested simplifying the consenting regime for the use of wellboats so that SEPA, rather than Marine Scotland, was responsible for licensing discharges. How do you view that proposal? If you view it favourably, would an amendment to the bill be required to facilitate it?

**Paul Wheelhouse:** We referred to the work that is going on in the Government to co-ordinate better the delivery and audit of regulation by SEPA and other agencies, such as Marine Scotland. I agree that the proposal would be worth looking at in that context. Our view is that the process as it stands works reasonably well. We are discussing the issue with SEPA and with Marine Scotland's licensing operations team, which licenses the discharge from wellboats. Perhaps we can come back with more substantive information about those discussions.

I do not know whether Willie Cowan has any points to add.

**Willie Cowan:** As I said, we work closely with regulatory colleagues in the field to improve how we manage the regulatory framework and to improve it for the industry, which is on the receiving end of it. Across the regulatory organisations, we are happy to look at what works best and whether a change would be better. We can certainly consider the proposal.

**Paul Wheelhouse:** I ask Lindsay Anderson to clarify whether the bill contains any provision on the issue and whether an amendment would be needed.

**Lindsay Anderson (Scottish Government):** Any amendment would probably not be to the bill. The deposit of substances from wellboats is dealt with under the marine licensing regime in the Marine (Scotland) Act 2010. If an amendment was required, it might be made via a bill such as this, but I think that it would be to the 2010 act.

**Graeme Dey:** The proposal strikes me as sensible, given that it would reduce bureaucracy and could reduce the costs that fish farmers bear.

**Paul Wheelhouse:** As long as the regulation is being properly policed and monitored—I put in that proviso—it is at least in principle good to rationalise the cost to the operator and simplify

how we operate. I have no doubt that SEPA would do a good job. We would need to write to the committee about how far we have got in the discussions and whether we can say anything concrete.

**Graeme Dey:** Has the SSPO raised concerns with you or your officials about the definition of a wellboat being too broad? If so, what is your response to that?

**Paul Wheelhouse:** Willie Cowan has looked at the issue.

**Willie Cowan:** Through our stakeholder engagement group, we have been in discussion with the SSPO and others. The definition is one issue that has been raised with us and we are looking at it.

**Gil Paterson:** At the aquaculture round table, Alex Kinninmonth of the Scottish Wildlife Trust said that the bill's definition of a species as commercially damaging includes the proviso that the species

"is itself of little or no commercial value."

He argued that account should also be taken of the ecological value of a species and that there should be a requirement to consult Scottish Natural Heritage before defining a species as commercially damaging. Do you agree? If so, do you intend to include such a requirement in the bill?

11:15

**Paul Wheelhouse:** On taking into account the wider environmental value of a species, I clearly do not want to put at risk any species that is an important part of the ecosystem and a native species that has a right to be there, if you like, and which has its own intrinsic value as part of its environment. I take the legitimate point that you have made about ecological value and the fact that a species may be just not commercially viable.

Willie Cowan is keen to come in on your point about the role of SNH.

**Willie Cowan:** As part of ministers' consideration of whether to go back to Parliament with an order specifying a commercially damaging species, we would take advice from advisers such as SNH to get to the position in which we could provide reasons for saying whether a species was commercially damaging. As part of my responsibility to advise the minister, I would consult bodies such as SNH in the first instance. In the second instance, if we were to propose a species as being commercially damaging, the order would be subject to a consultation exercise as well. There would therefore be internal



consultation within the regulatory field and public consultation before we brought an order to Parliament.

**Paul Wheelhouse:** Marine Scotland already has a role to advise us of the conservation value of species that might be considered for the list in the bill. I guess that there is a clear role for SNH to make similar assessments for freshwater environments. I am certainly happy with the principle as outlined by Gil Paterson.

**Alex Fergusson:** Is it possible to give an example for salmon aquaculture of a commercially damaging species as defined in the bill? Is that definition designed to include parasites and pathogens?

**Paul Wheelhouse:** A species that we propose to specify as commercially damaging—forgive my pronunciation if it is not correct—is *Mytilus trossulus*, which is a type of mussel that does not have a particularly thick shell, so the quality of product would not necessarily be attractive for commercial operation. We have already proposed that species for the list of those that might be deemed commercially damaging. However, as Willie Cowan said, we would need to consult on such species and ensure that we took on board interested views in that regard.

*Mytilus trossulus* has been proposed for the list because of its potential impact on the shellfish sector. The sector has a relatively modest turnover at the moment of about £10 million a year, but we believe that it has great potential for expansion.

Willie Cowan will address the point about pathogens and pests.

**Willie Cowan:** The short answer to Mr Fergusson's question is no, simply because it would be impossible to eradicate parasites and pathogens from the marine environment.

**Alex Fergusson:** I just wanted to clarify that. Thank you.

**The Convener:** I want to ask you about a subject that has been referred to in part already. It relates to the development of outline approval by the United States Food and Drug Administration of a genetically modified salmonid. We have discussed previously the potential development of farmed fish that could be sterile and the question of the guarantee of 100 per cent sterility and the development of GM salmon that could escape and become a commercially damaging species. Has any account been taken of the development in the USA in recent weeks to which I referred?

**Paul Wheelhouse:** I do not have a definitive answer on that issue, but I would be happy to write to you with one. I am sure that you are well aware of the Government's view on GM products and our desire, from the perspective of both domestic

consumption and export value, to keep our food chain and our much-valued food products protected against any damage arising from their being perceived as GM sourced. I am sure that, within that context, we would give detailed scrutiny to the issue to which the convener referred. If I may, I will come back to the committee with a detailed answer to the convener's question and give a definitive position.

**The Convener:** I put it on the record that I have been approached by both fish-farming interests and wild salmon interests on the matter, so it is becoming current.

We will take a strict five-minute comfort break and return at 25 past 11 to consider part 2 of the Aquaculture and Fisheries (Scotland) Bill.

11:20

*Meeting suspended.*

11:26

*On resuming—*

**The Convener:** We will make a start on part 2 of the bill. Jim Hume will lead on governance issues.

**Jim Hume:** There has been a long debate on district salmon fishery boards that goes back at least to the Hunter committee of 1965, which of course we can all remember. The bill does not propose dramatic changes to the salmon fishery boards but, interestingly, on 28 November, the Government bill team said that, during the passage of the bill, it planned to scope out a review and introduce further legislation in the current session of Parliament. Why has the debate on the salmon fishery board structure been such a long-running one? What potential changes are needed? Do we need larger boards so that they can manage all the extra duties, or do we need smaller fishery boards so that we can keep them local and in the community?

**Paul Wheelhouse:** I recognise the point about the historical situation, although I apologise that I am not as familiar with it as Jim Hume is, as my knowledge does not go back to the 1960s. Because many boards have developed in an organic fashion and as a result of local circumstances, we have a mixture of large boards and small ones, with different levels of resource in each. That means that, if we get into a position in which we place requirements on boards, there are potential challenges relating to the ability of smaller boards to adopt those measures and to cope with the additional bureaucratic elements, such as audit and the provision of information. We must be cognisant that there are a variety of boards across Scotland.

In my discussions with the managers of larger fishery boards, I have found that they recognise that situation and have sought to collaborate with smaller boards to provide them with a bit of expertise and support, where that is practical. Obviously, that cannot be done ad infinitum, because supporting the smaller boards has a financial implication for the larger ones, but a degree of collaboration is taking place between colleagues in the fisheries community to help smaller boards to adopt best practice and take things forward.

Jim Hume raises an important point about the review of where we stand. The policy memorandum signals that we are committed to carrying out further work to modernise the management structure for salmon and freshwater fisheries during the current session of Parliament. The bill is the first step, but not the final one, in taking forward our manifesto commitment on the issue.

We have asked officials to draw up proposals for the scope of that further work and we will be in a position to announce our next steps once we have considered that advice. The intention is to establish a baseline review of where we sit so that, as minister, I have an understanding of the mix of the boards that we have and of their capabilities, size and coverage before we move on to develop options, if there are options for further review. Any measures that are proposed would be consulted on fully—there would not be a precipitate change in arrangements—but I would not want to prejudge any review of the governance arrangements, which would be undertaken independently of ministers, because that would be prejudicial to the report. I would like to see what the industry and stakeholders think is the best configuration to deliver the right result for the sector.

Willie Cowan might like to make some brief comments on that.

11:30

**Willie Cowan:** Mr Hume's reference to the Hunter report was interesting. When I found out about the Hunter report, I thought that it could be only 10 or 15 years old, but it is not. However, it is still thought to have reasonable currency, and there have been several reports since then. We can speculate on why nothing fundamental has happened in the interim period. I think that that reflects the complexity of the issues involved.

As the minister said, we are commissioning a baseline report. Essentially, we are asking for a position paper on where we are. As part of that process, a desktop review will be carried out to establish what the reviews that have been done to date have said and to get an indication of why

progress was not made as a result of those reviews. Once we have that, we will be able to put forward options for a review that could consider the type of issues that Mr Hume has raised but, as the minister said, we would not want to prejudge anything at this stage.

**Jim Hume:** You talk about commissioning a review, waiting for that review to report, going out to consultation and then looking at the options and bringing forward proposals. The Government's bill team has already stated that it wants to do that during the passage of the bill. Surely that process would take some time.

**Willie Cowan:** No. We hope to establish the baseline review within the timetable for the bill. Our intention is to use the evidence that has been brought forward during the bill process to inform the options appraisal for undertaking the review. We intend to have the baseline report completed within the timetable for the bill, but not the whole review.

**Paul Wheelhouse:** There is significant interest in consultation on any proposals that we produce. Therefore, there will be a lengthy process before we reach any conclusions.

**Jim Hume:** I seek further clarification. You talk about having the review done within the timescale for the bill, but it would not be part of the bill process.

**Paul Wheelhouse:** It is not tied to the bill; it is just concurrent with the bill.

**Jim Hume:** Okay. Thanks.

**Jayne Baxter (Mid Scotland and Fife) (Lab):** Good morning. I am new to the committee and I am new to the bill. As part of my research, I have learned that proposals for the bill were developed by the freshwater fisheries forum. I looked at the Scottish Government's website, which says that it last met on 30 April 2009. Why has the forum not met for such a long time? Will it be reconstituted so that it can work with the Government on future structures for managing freshwater fisheries?

**Paul Wheelhouse:** That is a valid point. Welcome to the committee and, indeed, the Parliament, Jayne.

As you rightly identified, the forum, which was established in 2004, carried out a range of good work during its lifetime, including influencing and monitoring the delivery of the strategic framework for freshwater fisheries.

You made a fair point about the forum's future role. As we look to consider in detail the management structures for salmon and freshwater fisheries, this is probably the right time to consider the forum's role in the broader context. I retain an open mind on the matter. If we think that the forum

can play an important role in informing the discussion about structure and governance arrangements, I will be happy to look at how we reinvigorate the process, so that we get the stakeholder engagement in developing proposals that we need, to ensure that there is buy-in. There might be different consequences for different boards, given the variety of boards, so we would not necessarily want a one-size-fits-all approach, but a degree of commonality is useful, where possible, albeit that we will try to be flexible. I am open to using the forum as a vehicle for building in the sector's views.

**Jayne Baxter:** The committee received evidence that there was an unsatisfactory level of consultation on part 2 of the bill. The Association of Salmon Fishery Boards expressed that view. How do you respond to the suggestion that there was insufficient consultation?

**Paul Wheelhouse:** Did the ASFB refer to a specific issue in that context?

**Jayne Baxter:** The ASFB said:

"We do not believe that some aspects included in Part 2 of the Bill were specifically consulted on."

**Paul Wheelhouse:** I defer to Willie Cowan on the process. He was in post at the time of the consultation—I was not party to that. I can say that I am happy with our engagement with the ASFB about its concerns in the time that I have been a minister. We have tried to reflect on the association's concerns about the process of the bill and specific measures in it, and I hope that we have reached a greater degree of consensus with the ASFB and other stakeholders, such as the Scottish Salmon Producers' Organisation. There might be concern about process, but outwith the consultation process we have moved forward significantly in our discussions with the ASFB.

**Willie Cowan:** The consultation on part 2 fell into two parts: one was about improved management, the proposals on which largely came out of the recommendations of the Scottish mixed stock salmon fisheries working group; the other was about improving governance.

We consulted in general terms on improving governance in the fishery boards, but we did not go into the detail and say, "Good governance means X, Y, and Z." However, as I said to the committee in a previous meeting, everything that is in the bill is pretty much what would be expected of a public body. There is nothing in there that we would not ask other public bodies to undertake. We might not have said that better governance means X, Y, and Z, but it would be hard to argue against what is in the bill.

**Alex Fergusson:** Minister, you said that the structure and workings of district salmon fishery

boards will be returned to during the lifetime of the Government and I think that you said that there is huge interest among stakeholders in taking part in the consultation. There is obviously a lot of interest in what the Government is seeking to do. Given the amount of work that is still to come, why is it necessary to address the structure of salmon fishery boards at all in the bill? Are we in danger of putting the cart before the horse?

**Paul Wheelhouse:** We are not dealing with the detail of such proposals in the bill. The issue takes us back to Jim Hume's point about finding a balance. The Government has a duty to look at things in the round and strike a balance between the desire for sustainable growth in important sectors such as fin-fish and shellfish farming, the desire to protect biodiversity in wild fisheries and to support the angling community to continue its activities in a sustainable way, and the desire to protect the environment as a whole. We have a unique role—not necessarily in a global sense, but in a Scottish context—in managing those interests in the best interests of Scotland. It is important that we reflect the fact that various agents are involved, including the salmon fishery boards and the aquaculture sector. Having a bill that did not in some way reflect that situation would be a mistake.

I will ask Willie Cowan to address the history of how we came to the point at which we are having the review of the governance arrangements in the fishery boards.

**Willie Cowan:** The key point is that work had been done under the mixed-stock fisheries working group, which provided ministers with recommendations. The bill gave us an opportunity to implement those recommendations. The work had been completed and there was a sound basis on which to introduce propositions to Parliament.

On good governance, the key point is that the bill proposes to bring fishery boards into line with the expectations on other public bodies. The issue is not specifically about the workings of the fishery boards; it is about the workings of the fishery boards as a pseudo-public body. The parts of the bill that are about good governance will translate quite readily into whatever propositions are ultimately brought forward for our management structure. Clearly, we do not expect the good governance provisions in the bill to fall over as a result of the review that is to come. The bill essentially sets up the cultural changes in what the expectations on public bodies should be with regard to good governance.

**Alex Fergusson:** I appreciate the explanation.

As the minister said, there are large boards, small boards and medium-sized boards. District salmon fishery boards cover a variety of

memberships and structure sizes. One thing that they share is that membership of them is almost entirely voluntary. If all the proposed changes go through, there will be an increased workload for the boards. Have you taken into account the fact that that might impact on the time of those who currently give their time and expertise voluntarily, to the extent that they might be less willing to do so?

**Paul Wheelhouse:** As in any change of this nature, that is a risk. That is why consultation is crucial. We need to understand the extent to which we might lose expertise through people being less willing to give their time voluntarily. I do not have a prescriptive view of what will emerge in terms of the governance structures and the way in which the boards deliver their core responsibilities. It might be better to address the point that Jim Hume and I discussed earlier, with regard to mergers and so on. We are not saying that there have to be mergers, but there might be opportunities for collaboration between smaller boards, with one person providing data to more than one board.

We need to understand what the financial and other implications of the proposals might be. That is why the review is important. We need to understand where we are and where we might go and to consult on the options before deciding what path to take with regard to the smaller boards in Dumfries and Galloway and the larger ones, such as the Dee and the Don boards. We will take on board the results of that consultation before we develop any firm proposals. I do not want to be prescriptive at this point.

As Jayne Baxter said, we need to engage with the sector and ensure that it can live with anything that we come up with and that it understands where we are coming from with our requirement to improve the governance and ensure that the delivery of policy is optimised, while taking account of local circumstances, where we can.

11:45

**Alex Fergusson:** And to take full account of those local circumstances—an aim that I entirely agree with you about—you would not necessarily disregard the effectiveness or efficiency of small boards at this stage.

**Paul Wheelhouse:** Absolutely. It is the same with any organisational structure; in local government, for example, we can have extremely efficient small local councils. We do not necessarily need a one-size-fits-all approach—it depends on what suits local circumstances. I undertake to look at those issues and ensure that we reflect them and do not come up with some overly prescriptive approach that might stifle good practice at a lower geographical level. We must

ensure that the functions are delivered without being too prescriptive about how that delivery might be achieved.

**Alex Fergusson:** Thank you for those quite reassuring comments, minister.

Finally, has the Government given any thought to introducing a statutory code of practices to cover DSFBs?

**Paul Wheelhouse:** I have not taken a view on that and do not know whether historically my predecessor had any position on it.

**Willie Cowan:** No. Like the SSPO, the ASFB has a code of practice and we have no plans to introduce a statutory code.

**Paul Wheelhouse:** It would present the same problems that we highlighted in our discussion about a code of practice for fin-fish farming. The degree of micromanagement implied in such a move would mean that we would be constantly coming back to the committee to give updates and seek approvals for anything of a statutory nature, and that might stifle the very flexibility that you referred to with regard to FMAs and the adoption of new technologies and technological advances as they happen.

**Alex Fergusson:** Thank you very much.

**The Convener:** Graeme Dey has a question on the same subject.

**Graeme Dey:** The committee has heard witnesses talk at some length about the conflict between netmen and DSFBs in one or two parts of the country. In your experience, is that an accurate reflection of the scale of the issue, or is it more widespread? Regardless of how frequently or infrequently such problems arise, do you think that a statutory dispute resolution process should be established to tackle them?

**Paul Wheelhouse:** Although I am aware of some local tensions, I do not have the impression that such conflicts are widespread or that a constant stream of such issues involving netmen is being presented. About 95 per cent of netting activity has been decommissioned across Scotland, and only a relatively small number of sites and businesses are undertaking it. Clearly there are issues with regard to the governance of these activities, and we expect the review that we have just discussed to take into account the future governance arrangements of netting activity and the work of netmen.

It might be worth looking at the potential for some form of mediation. I know that there are tensions in particular areas—indeed, I know that the member has a constituency interest in that respect and that the issue might also butt up against Nigel Don's constituency. Given that

issues arise from time to time, a vehicle for having a degree of negotiation on such matters might be worth considering in the review that we have outlined.

**Graeme Dey:** Thank you for that.

On the theme of governance, it was suggested to the committee that the management of netting should be changed with the activities of netsmen overseen by inshore fisheries groups and conducted under a days-at-sea regime. How do you view such a proposal? It strikes me that, if nothing else, it will in practice be very difficult to police a days-at-sea arrangement.

**Paul Wheelhouse:** Indeed. As you know, we get satellite monitoring information on fishing vessels through the vessel monitoring system and the fleet is increasingly adopting e-logs. As a result, we have detailed means of monitoring what is happening in our fishing fleet. The picture for netting activity is quite different; although drift netting has been banned for a long time in Scotland, we still have static nets. I understand the principle behind the netting community's suggestion of a days-at-sea regime—after all, it regards itself as a sea rather than a freshwater fishery—but the issue could be considered in proposals outwith this bill and the governance review could examine the interaction with, for example, Marine Scotland.

With your permission, convener, I ask Willie Cowan to address the specific days-at-sea issue.

**Willie Cowan:** I have little to add to the minister's comments, except to say that the forthcoming review will clearly need to look at the relationship between the netsmen and the local fishery boards and, following that consideration, the question of what an appropriate management regime for the netsmen might be.

**Graeme Dey:** With the convener's indulgence, I will take that a little bit further. The Association of Salmon Fishery Boards has advanced the idea that DSFBs should be granted the right of first refusal to either purchase or lease existing netting operations at the market rate. Might that be considered?

**Paul Wheelhouse:** We would want to avoid a situation in which any new market would be created for the sites that have been decommissioned. Our overarching aim is for those sites to continue to be discontinued—if I can put it in those terms—rather than promoting the creation of a market value for something that has not historically had much value because it has been a heritable right and has not been traded. I am willing to take a more considered view on that to satisfy the committee and the member in that area, which I know is of substantial interest.

I do not know whether Willie Cowan has a view on anything that has been done to consider that in the past, which might inform the discussion.

**Willie Cowan:** We have not looked at the issue in any great detail, and it was not part of the consultation. The issue is so substantive that there would be risks in lodging amendments to enable such a change to happen without properly considering the implications.

**The Convener:** Carcass tagging is an issue that has been raised in evidence, and the use of numbered and recorded tags has been suggested, although that has been rebuffed by certain netsmen. Should tags be numbered?

**Paul Wheelhouse:** I understand some of the concerns that have been raised with regard to the difficulty in scanning tags while boats are out doing their work. We see no reason why, when a boat docks or comes to shore, there should not be scope for it to scan the tags at that point. In principle, I and the Government believe that there is no technical reason why that could not be undertaken. I will ask Willie Cowan to explain whether any efforts have been made to address that concern to date.

**Willie Cowan:** Again, it is a key operational issue. Ministers are seeking, through the bill, the power to introduce a carcass-tagging regime by order. Prior to that order, there would be a consultation exercise that would focus specifically on the pros and cons of a numbered scheme versus a non-numbered scheme. We will come back and look at the issue in detail, but we recognise that it is a key issue for both sides.

**Paul Wheelhouse:** As we understand it, there is certainly no technical reason why that could not be possible, but we have to take account of the practicalities of it to a degree.

**The Convener:** It is illegal to sell rod-caught fish. Would compulsory tagging apply to rod and line-caught salmon and sea trout?

**Paul Wheelhouse:** As I understand it, although it will be an offence under carcass-tagging regulations to be in possession of a fish that is not tagged in accordance with regulations—which will aid the enforcement of fisheries legislation—there is no proposal of the type to which you are referring.

**Willie Cowan:** Essentially, under these proposals, a fish would have to be tagged to enable it to enter the market. If it was not tagged, it could not enter the market. There would be some particular issues with regard to the convener's question—essentially, we would have to run a dual scheme with two tagging programmes to enable that to happen.

**The Convener:** We would be interested to follow that up. If selling a rod-caught fish is illegal, have you any intention to make the purchase of such fish illegal if a tagging scheme is introduced?

**Paul Wheelhouse:** It would be best to address the question of what the implications of that would be and whether it would even be possible to implement in our consolidated response to the committee—if that is acceptable to you, convener.

**The Convener:** The matter is of considerable interest to us given the evidence that we have about the number of salmon and sea trout that are caught and the questions about how accurate the figures are, not just for the caught and released ones but for the caught and killed ones. It is important for us to know whether you are going to take steps to ensure that we have more accurate figures. That is what the tagging is all about.

**Paul Wheelhouse:** I am happy to confirm that I agree with you that it is important that we have accurate data. Given the importance of understanding the impact on our wild stocks and the need to get a better understanding of trends as they occur, it is important that we have comfort that the figures are accurate. I am certainly willing to come back to you on what is required for that.

**Willie Cowan:** I think that the issue falls neatly—dare I say it?—into the forthcoming review, which is all about how to improve fisheries management. Having a detailed knowledge of the populations in the water and what is extracted from it is a key part of that.

**Paul Wheelhouse:** We can learn from experience elsewhere. I understand that, in the Republic of Ireland and Northern Ireland, rod-caught and net-caught salmon are already tagged. We are not the first part of the world to be considering the matter, so we can learn from our colleagues elsewhere who are implementing such measures and see whether it is feasible to improve the quality of the data as you suggest, convener.

**The Convener:** We move on to conservation measures. The bill gives Scottish ministers new powers to change annual close times at their own hand. SNH believes that those powers will be useful, but witnesses were unable to give examples of rivers where the powers should have been used. Are there examples of rivers where Scottish ministers would have liked to change close times but could not do so?

**Paul Wheelhouse:** I am not aware of any specific examples. With your permission, I ask Willie Cowan whether there have been any historical attempts to change close times in respect of specific rivers.

**Willie Cowan:** We will write to the committee once I have consulted my scientific colleagues on the specific question.

One purpose that the power could be used for, as an example, is simply to reflect the changing environment, potentially through climate change. We might traditionally have expected a spring run in a river to happen in a particular month, but evidence might show that it is now happening two, four or six weeks later. If that continues, it would make sense to change the timings to reflect the actuality of what is happening on the ground or, I should say, in the river.

**Paul Wheelhouse:** You make a legitimate point, convener. A number of our major salmon fishing rivers have conservation status for salmon, so we have to keep a constant eye on the matter to see whether there are situations in which fishing levels become unsustainable and, if so, to take appropriate action. At this point, I am not aware of any particular cases in which that has been considered, but the point has been made that, for the committee's benefit, we will come back to you with any comments from the science advisers on whether there have been situations in which that has been considered.

**The Convener:** On some rivers in the far north, which I represent, the position on what can be killed in terms of the spring salmon run is not yet in line with practice in some of the major boards. I am not saying that it is good or bad, but that is related to the close time issue. We need some clarity from you on that.

**Paul Wheelhouse:** Again, prudence and governance will ensure that fisheries boards take those matters into account in future where that is not happening. I am confident that many boards are operating responsibly, but there might be others that I am not yet aware of specifically that are not doing that.

**The Convener:** Thank you. I hand over the convener'ship to Graeme Dey.

**The Deputy Convener (Graeme Dey):** We move on to the subject of introductions. Jim Hume has some questions on that.

**Jim Hume:** Concerns have been expressed, specifically by Dr Bean of SNH, about introductions and whether fisheries boards are going through all due process regarding habitats directive appraisal. Dr Bean said that, in 2010, nearly 13,000,000 salmon and sea trout were to be released, and he reckoned that about a quarter of those came from a single special area of conservation—a single river.

Does the minister think that an independent advising body and, perhaps, a public register of stocking decisions should be introduced in the bill?

If so, would amendments need to be lodged by the Government or others to provide for that?

12:00

**Paul Wheelhouse:** In a minute, I will invite Lindsay Anderson to comment on whether any amendment would be required and what act would require to be amended.

Fish introductions are an important matter. The division of responsibilities for consenting them means that there is no national picture of stocking practices. You are right to refer to the need for a register or some sort of monitoring of stocking practices. Currently, that does not happen.

We seek to develop a consenting regime that ensures that stocking practice is in line with good practice guidelines to take account of possible concerns about its implementation, particularly when it butts up against conservation areas and particular local conservation issues, and that appropriate record keeping and monitoring take place consistently throughout Scotland.

To date, I have not picked up any issues regarding publication. I ask Willie Cowan to say whether that has been considered and disregarded or whether we have not considered it yet.

**Willie Cowan:** We seek to do exactly what Jim Hume outlined: to address the lack of a clear picture of stocking practices throughout the country and the reasons for the stocking. We are trying, yet again, to improve the transparency of the picture throughout the country and to get a more granular understanding of why decisions to stock are taken.

We want boards to state what fish from what source they want to stock, in what area for what purpose, and what outcomes they expect from that. To complete the loop, we want them to come back at whatever time period is appropriate and inform us that the outcome of the stocking exercise was that the fishery was or was not improved.

We are trying to do exactly what Jim Hume suggests: improve transparency throughout the country and locally.

**Paul Wheelhouse:** I invite Lindsay Anderson to comment on the enabling powers and other powers that might be required to facilitate that.

**Lindsay Anderson:** Jim Hume asked about the creation of a body that might monitor stocking activity and about a register. There is nothing in the bill about either of those, so an amendment would be necessary.

To give a typical lawyer's answer, I suppose that what amendments would be necessary would

depend on the policy that was introduced. However, the approach in the bill has been to amend the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003, so that would be one option, but the bill could amend other primary legislation or, equally, contain freestanding provisions. That decision would be driven by policy considerations and what would be easiest.

**Paul Wheelhouse:** Earlier in the meeting, we had a lot of discussion about the difficulties with the publication of sea lice data. If we proposed to introduce a published stocking register, it would probably invite quite a lot of robust views from different parties. Therefore, proper scrutiny of the proposal, and sufficient time to consult on its implementation, would be needed. At this stage, one concern that I would have about any such amendment would be whether there had been sufficient consultation with the parties.

**Willie Cowan:** No additional body is required because Marine Scotland does the consenting, so we already know the consents that are being made. The bill seeks to understand the concerns that DSFBs are making at their own hand. An infrastructure is in place to enable what Jim Hume suggests to happen.

**Jim Hume:** Lindsay Anderson suggested that it could be done, but that it would be a matter of policy, which puts the matter back into the minister's court. Does the minister feel that enough scoping has been done at this stage to make a decision, or is he suggesting that the matter will be scoped and acted on after the bill is enacted, as with the approach on the fishery boards?

**Paul Wheelhouse:** On sea lice data, we have reached a position in which we have a provision to ensure that data is collected. That is perhaps unlike the issue that we are discussing, but I would not want to diminish its importance, as it has an enabling role in providing the feedstock for any subsequent discussion about what is happening nationally. It fills an information gap.

At this stage, I would like to explore whether we can reach another voluntary agreement and avoid having to legislate if at all possible. We will try to get the fishery boards and other colleagues in the sector to engage with us on the issue and perhaps provide a degree of transparency, without our forcing them to do that, in the same way as we have engaged positively with the SSPO on the provision of data on fin-fish farming.

**Jim Hume:** That is useful.

**The Deputy Convener:** We move on to related issues, some of which are not included in the bill. Jayne Baxter has questions on data on wild salmon and sea trout stocks.

**Jayne Baxter:** I want to continue on the theme of how we gather data and use it to inform decision making. I understand that the data on wild salmon and sea trout are collected through a combination of fish counters, fish traps and catch data. How might the quality of data on wild salmon and sea trout be improved? Are more salmon counters needed? Should effort data be collected for rod and line fisheries?

**Paul Wheelhouse:** There is certainly significant interest in the national media whenever data are published, and I see the Twitter feeds thereafter, with challenges to the data or to the understanding of what they imply. One issue is that we need to estimate the degree to which the same fish are being caught more than once, because of catch and release. As we try to encourage all fishery boards and anglers to adopt that approach, which those in the angling community deem to be good practice, the risk of fish being caught more than once will obviously increase across the country. We must control for such matters through the science. I have visited colleagues at the marine lab in Aberdeen to discuss the difficulties that they have in addressing such issues, and I will go to the lab at Faskally soon.

An important bit of work that can be done outwith the bill, through the ministerial group on aquaculture, is to try to hone down the science to ensure less duplication of effort and to focus what is a relatively constrained amount of money through Government funding to the sector. We need to fill some of the gaps and improve our understanding of what is happening. It is important that we try to understand exactly what is happening with wild stocks.

The issues that affect the health of those stocks are multifactorial. There has been discourse and public debate about the role of fin-fish farming, and there might be an issue there, but there are many other factors, not least of which is climate change, to which Willie Cowan referred. We know that river temperatures are rising, which in many cases is causing damage to wild stocks. There are a number of influences. We have a genuine interest in improving the quality of the data. That comes back to the issue that the convener raised before he left about understanding exactly what is happening and getting better quality data.

I invite Willie Cowan to comment on whether we could do anything of a technical nature to improve the data that we currently receive from wild fisheries.

**Willie Cowan:** There is on-going debate about the usefulness of collecting data on effort. For example, every couple of years, my son and I take a fishing rod out of the garage and never catch anything, but we could spend all day fishing. I could spend eight hours on the river bank and

catch nothing, but my colleague, who is a fisherman, can spend an hour on the bank and catch two or three fish.

All those issues about effort come back to the review that we are beginning to scope out. The key question for the review is what gaps exist in our ability to ensure sound populations of wild fishery stocks and how we best manage those. One question that we will need to answer is: what data do we have, where do the data fall short and what are the mechanisms by which we can get the data that we need? Issues such as whether we need more fish counters are bound to come into that consideration.

**Jayne Baxter:** What would be the options for funding any additional measures?

**Paul Wheelhouse:** Under the MGA's science or research strand, we hope that industry and academia will work together to minimise duplication of effort so that we can ensure that resources are used as efficiently as possible. The case has been made that we have small pockets of research that are important in their own right—I would not want to give the impression that they are not important—but our research may need to take a more strategic view to ensure that it has the greatest impact on improving our understanding and informing industry so that we better understand where effort should be made.

I would like to think that, by providing more strategic research, we can attract new funding because the research will be seen to be more valuable to a greater number of people rather than have a niche function. I am not at the stage where I have an understanding of that, but as we gain a greater understanding of the issue from the ministerial group on aquaculture—it will meet shortly, in February I think—I will be more than happy to ask that the committee is given feedback, at a subsequent committee meeting or in writing, on what might be possible.

You raise an important point because things such as satellite tagging of salmon are very expensive, although they provide great data and have been very instructive in telling us where salmon migrate to. However, such initiatives are relatively limited in scope at the moment because of the very high cost per fish of satellite tagging of salmon.

**The Deputy Convener:** I want to move on to look at issues surrounding the salmon spring run. Do you feel that the existing conservation measures are sufficient to allow for recovery of the spring salmon run? Rivers and Fisheries Trusts of Scotland told us that only 9 per cent of last year's spring stock catch—562 fish, as I recall—was retained. Against that backdrop, should ministers



consider making catch and release mandatory in the spring?

**Paul Wheelhouse:** Certainly, the recognised trend is that fish become more difficult to catch throughout the year. I should stress that I am not a fisherman myself—

**The Deputy Convener:** Nor am I.

**Paul Wheelhouse:** So I talk from little experience—I have even less capability than Willie Cowan, who seems not to have a high degree of expertise in this subject either—but I understand that the fish are easier to catch in the early part of the year. Perhaps Gil Paterson will confirm that, given that he sounds like a better fisherman than Willie Cowan.

**Gil Paterson:** From great experience, I can say that fishing is hard all the time.

**Paul Wheelhouse:** As we go through the season, the individual fish become harder to catch. I am not sure that I fully understand why that is, but I know that the spring catch, when people are obviously catching fish before they have had a chance to spawn, is particularly important for conservation reasons.

I am not as au fait with the figures as Willie Cowan might be, so with the convener's permission, I will ask Willie Cowan to address the points about governance issues, how many fishery boards throughout the country have taken the decision to take more rigorous action in respect of the spring catch and whether there is a problem there.

**Willie Cowan:** The spring runs are certainly an issue, although they are more of an issue in some areas than in others. A key point that we do not understand is why some rivers do reasonably well in the spring while others, which may even be in relatively close geographical proximity to them, do not. The issue is hugely complex. However, the bill will provide ministers with an order making power to introduce regulations for a national interest, which would have the potential to override local fishery board interests. Powers within the bill would enable ministers, if it were thought necessary, to introduce national overriding regulations that would apply to all fisheries.

12:15

**The Deputy Convener:** Willie Cowan made a point about the variations in the decline of spring stock across different rivers and earlier he touched on the suggestion that some fish are returning later in the year. Given those points, do we need to carry out greater research into this subject?

**Paul Wheelhouse:** That is a very fair point. One of the things that has struck me throughout much

of the debate has been the availability of studies in countries such as Norway and Ireland. I know that there are data issues, which Alex Fergusson has highlighted, but we need to get to a point at which we have an understanding that is more relevant to the particular contexts of our rivers and our fish—not that our fish have passports, but I mean the fish that return to our rivers—so that we know what environmental and human influences there are on our fisheries stocks. I support that in principle.

I would like to invite the MGA to give me a steer on what it thinks are the most important priorities. I would be happy to feed in to the MGA any ideas that the committee has as a result of its deliberations with the various interests and say, "These are issues that have been raised by my parliamentary colleagues. Can you give us some feedback on what might be possible?"

You are absolutely right: we need to have a better understanding because of the dynamics of things such as climate change. We have very little control of what happens elsewhere in the lifecycle of a salmon—for example when a salmon goes up to Greenland and areas far away from Scotland—but we need to understand what happens while salmon are in our territorial waters and our rivers so that we can better understand how we can protect our stocks and work with our stakeholders.

**The Deputy Convener:** Thank you, minister.

What further conservation measures could be considered to tackle decline in sea trout? What detail can you provide on research into that subject, for example the Moray Firth sea trout project?

**Paul Wheelhouse:** Although we have very little direct relevant research on sea lice impact on salmon, we have a clear understanding that there appears to be some impact on sea trout, which is an example of where we have a bit more information. I confess that I am not familiar with the Moray study, so I ask Willie Cowan to address that question.

**Willie Cowan:** I will neatly pass the question on to my scientific advisers and I will write to you, as I do not know the detail of it. We will come back to you with the detail of what we know and what we are doing.

**The Deputy Convener:** That will be fine, thank you. Alex Fergusson has a question on other stocks.

**Alex Fergusson:** The bill is concerned primarily with salmon fishing, with regard to freshwater fisheries, but obviously freshwater fisheries are not confined to salmon, sea trout and brown trout. We took evidence from the Scottish Federation for Coarse Angling, which was a little bit disappointed

that some of its concerns had not been included in the bill.

In particular, the federation had hoped for some restrictions on the netting and trapping of coarse fish. It had also been keen to see some regulation of those responsible for the management of reservoirs, with regard to taking into account the wellbeing of coarse fish stocks in the management of their reservoirs—presumably when they are altering the water levels.

Given the evidence that we have taken, what are the minister's views on that aspect of fisheries and does he have any ideas about introducing measures to address those concerns?

**Paul Wheelhouse:** We do not have any specific measures in mind that I am aware of, but perhaps we could go away and look at the evidence that was presented by those who represent coarse fishing interests and write to the committee with a view on how either the governance review or other measures might take on board those concerns.

**Alex Fergusson:** Before Mr Cowan replies, maybe you could address this question as well, for the sake of time. Could the management of other species be brought within the auspices of the district salmon fisheries boards, for example?

**Willie Cowan:** That is exactly what I was going to say. The forthcoming review is not a review of salmon and trout; it is a review of fisheries management. We will not go into specific species. The review will look at the management of Scottish fisheries, not the management of salmon and trout.

**Paul Wheelhouse:** If there is environmental concern about the health of those stocks and it becomes relevant to the management of fisheries, we will see that those are managed appropriately through governance.

**The Deputy Convener:** Part 4 of the bill concerns shellfish. To what extent is Scottish Water responsible for shellfish waters failing to meet class A and class B standards at the moment? How do we ensure that Scottish Water engages well with agencies and stakeholders, and, just as important, informs them promptly when a pollution incident occurs, for example?

**Paul Wheelhouse:** We are certainly aware that there are risks. A shellfish site may be consented and then, because of the nature of the regulatory environment, it is possible for Scottish Water to be charged with affecting the quality of the water by downgrading it from class A to class B or class C. Scottish Water clearly has a role in that. I am conscious that Scottish Water was not able to take part in this meeting for whatever reason—we will engage with it to find out why it could not engage with the committee. I do not, therefore, have a

definitive view on Scottish Water's perspective on its role in shellfish production.

The class A standard means that the product can be marketed directly to retail outlets and consumers and if there is a risk that the water can be downgraded to a class C, that is a major concern for shellfish production.

Willie Cowan might have had more contact with Scottish Water on this subject.

**Willie Cowan:** We operate a shellfish forum that meets quarterly and brings together all the players: the industry, the regulators, and Scottish Water.

One issue is the impact on waters that are protected under the European directive and will be protected under the proposed legislation, and how we might expand the waters within which class A product can be grown. The subject is complicated, as these things are, but Scottish Water is engaged with the shellfish forum. One of the practical things that we are trying to get is a real-time notification when there has been, for example, a sewage spillage as a result of a heavy storm. We are trying to set up some kind of red light or red flag system so that Scottish shellfish growers can be notified very quickly when an incident has happened in an area so that they can manage their business around it.

**The Deputy Convener:** Can you briefly define "quickly" and the kind of timescale that you are talking about?

**Willie Cowan:** We hope that the notification would be given within a day or two of the incident happening.

**The Deputy Convener:** Could it not be any sooner than that?

**Willie Cowan:** The shellfish forum and Scottish Water are discussing how quickly it could be done and the mechanisms by which it could be done.

**Paul Wheelhouse:** I have heard directly from Walter Speirs and through stakeholder engagement that the sector is very supportive of what the bill proposes. The sector has not raised any concerns about these issues. Clearly, consumers will find it valuable to understand what the notification process will be for safety reasons, and I absolutely agree with that, but the shellfish producers are very happy with what we are proposing.

**The Deputy Convener:** Moving on, Jayne Baxter has a question on the subject of shellfish and shellfish orders.

**Alex Fergusson:** That is my question, deputy convener.

**The Deputy Convener:** I am sorry; Alex Fergusson has a question.

**Alex Fergusson:** I am not quite sure how you can get me and Jayne Baxter muddled up, convener. We will move swiftly on.

I am delighted to welcome the Government's recognition of the cockle-fishing problems—particularly illegal cockle fishing—on the Solway coast, and I am delighted that it has seen fit to draft amendments that address what is a serious local problem. I do not want to go into too much detail for time reasons, but one problem that the enforcing agencies have raised is the fact that the offence, as it stands, relates to somebody being found actively harvesting cockles on the foreshore. Health and safety reasons dictate that enforcement personnel do not go on to the foreshore, which is quite understandable when you think of Morecambe bay.

One new power that will, I hope, be given, is that persons found in possession of the apparatus and paraphernalia associated with cockle fishing could be subject to court proceedings. Gangs of illegal cockle fishermen go out on to the foreshore and do what they do. When they come back on to dry land, they are not necessarily in possession of that paraphernalia or, indeed, the harvested cockles, which can be left to one side. Is there anything that the minister can add that might address that situation? At a meeting arranged by Marine Scotland in Dumfries to address the situation, an assurance was given to look at the possibility of powers of arrest if people were deemed to be acting suspiciously in a way that allowed others to think that they might be engaged in illegal activity. I am not sure that that is addressed by the proposed amendment, but can it be?

**Paul Wheelhouse:** A lot of the measures may be determined by how the regulation is policed. I am aware that concern has been expressed about what rigour there will be because Marine Scotland does not have a team permanently based in the area. I want to give some assurance on that. We know that, because of the nature of the activity in a tidal area, the activity will occur at low tide. Resources can be targeted to investigate activities at those times. When we know that there will be a high tide, there is no point in having teams in place to survey activities that will not be taking place. We can be a bit more sophisticated about how we target resources to detect what is happening.

I appreciate Mr Fergusson's concerns about the safety of those who are doing the inspections, but we can take a risk-based approach. We know how to focus our efforts on where and when the activity may happen and ensure that resources are in place, which will, I hope, help to detect the activity. Mr Fergusson also makes a fair point that, if

people are parted from their paraphernalia and equipment, it is more difficulty to prove their involvement in the activity.

I am not sure whether we have the time to discuss the issue further, so I could write to the committee with more detail. However, I invite Lindsay Anderson to say what powers are in the bill in that respect.

**Lindsay Anderson:** We are still considering the amendments that are to be lodged, so I do not want to stray into a policy issue. However, there are issues about evidence, burdens of proof and how attempts at illegal cockle fishing can be proven. Relevance is certainly the aspect of the offence that we would be considering. That comes down to how evidence is gathered and proven. Those are things that we are certainly aware of and they are being fed into the policy process.

**Alex Fergusson:** I am quite happy with that, and I look forward to seeing the detail of the amendment when it is lodged.

The fact is that, over the past few years and, as far as I understand it, on a continuing basis, illegally fished cockles are getting into the food chain somehow. Therefore, as we have heard in a lot of evidence—we have had some good evidence on this—there is a traceability issue. What that evidence seemed to come down to is that the various responsible agencies could be considerably improved. We were certainly given evidence that the situation is improving, but what steps are being undertaken?

12:30

**Paul Wheelhouse:** I am conscious of the time, so I will be as brief as I can be.

Your statement has some merit with regard to past behaviour and indeed is why Richard Lochhead asked Marine Scotland to hold in August 2012 a meeting that the member himself attended and which brought together all the public bodies with a regulatory and enforcement role in illegal cockle fishing. I am pleased to report to the committee that we now have a much more joined-up approach to the enforcement of the law against illegal cockling and that most, if not all, of the relevant bodies have now put in place formal memorandums of understanding and data-sharing agreements. I hope that this is an important step in understanding the scale of the problem, that it will inform future targeting of resources and effort on tackling it and that, when we have the detail of the amendments, they will inform the "how" in how we will go about this.

**Alex Fergusson:** Thank you very much.

**The Deputy Convener:** I think that we are entering the home straight of this evidence session.

I believe that, this time, Jayne Baxter has a question, which is on charging.

**Jayne Baxter:** I believe that a number of witnesses have raised concerns about when Marine Scotland would apply charges. What type of charges are being considered under the section in question?

**Paul Wheelhouse:** As you will appreciate, the bill does not contain specific details on the powers that we are seeking. As Willie Cowan said in relation to other aspects that are not yet specified in the bill, we will make the committee aware of such matters and consult both it and the wider stakeholder community on any detailed proposals before we make further regulations.

The general principle is that Marine Scotland provides a number of services free of charge or, at best, at less than full cost; however, given the demands of the growing marine industry sector and the public finances themselves, such a principle is no longer sustainable. The primary purpose of charging is to promote the efficient use of resources. Indeed, there are compelling arguments for charging where public services are provided in competition with those in the private sector, where a direct economic benefit accrues to the user or, where practicable, to recover the costs of regulating commercial activities.

At the moment we have no detailed proposals to give to the committee. There are some things that in the discourse on Twitter, in our letter to the committee and by various other means we have ruled out in a practical sense—for example, we have no plans to introduce rod licences in the foreseeable future—but, aside from that one proviso, we do not want to bind our hands with regard to the specific charges that we are ruling in or ruling out. In other words, there is nothing to apply charges to yet—if that makes sense. We are keeping our options open about the detailed charges that might be introduced.

**Jayne Baxter:** That is helpful.

**The Deputy Convener:** Claudia Beamish has a question on sustainable development and the policy memorandum.

**Claudia Beamish:** As we near the end of the evidence session, minister, I want to ask you about the assessment of sustainable development in the policy memorandum. Professor Colin Reid of Dundee University has expressed concern in that respect, stating:

“the assessment of the impact of the Bill for sustainable development ... is woefully inadequate.”

Of course that is only one view but I wonder whether you can reassure the committee by giving us your views on the matter and explaining how sustainable development was assessed in relation to the environmental, economic and social impacts of the bill's provisions and possible alternatives. What steps were taken to assess such impacts? If the assessment showed any negative impacts, were any trade-offs identified? How has the assessment informed or shaped developments or changes as the bill has progressed?

**Paul Wheelhouse:** I will start off, although I might well bring in Willie Cowan later.

We believe that the bill is underpinned by good understanding of the science, which we think is key to the matter. The work will continue through initiatives such as autoDEPOMOD, which I mentioned earlier and which will look at the sector's future sustainable growth to facilitate a greater understanding of what can be sustained at a local level and to consider what constitutes sustainable development when a planning application is submitted for additional biomass in a particular location.

I recognise that sustainable development encompasses a number of facets—economic, environmental and social. That is foremost in our minds and is part of the balancing exercise in a bill such as we are considering, in which we must take account of the legitimate aspirations of a sector to grow, ensuring that that happens in a framework that means that the breadth of civic Scotland can be confident that growth is sustainable. That approach is reflected in the provisions in the bill. The clear message is that growth must be sustainable.

We have been attacked from both sides of the debate, by wild fisheries interests—although not everyone—and aquaculture interests. We have taken on board points where we could do, but we have charted a course that enables me to be satisfied that we have struck a good balance.

I will ask Willie Cowan to comment—briefly; I am conscious of the time—on the detail of what was done in relation to consideration of the sustainability aspects of the bill.

**Willie Cowan:** Given the complexity of the subject, it might be better to respond in writing, if that is okay with Ms Beamish.

**The Deputy Convener:** Are you happy with that, Ms Beamish?

**Claudia Beamish:** That would be helpful. Detail of the assessment that was undertaken during the bill's development would be helpful and would reassure the different interests that are involved, from a commercial and an environmental

perspective, and the fragile rural communities that are affected.

**Paul Wheelhouse:** There are areas of the Scottish economy in which there is much better understanding of the economic impact and full supply chain than is the case in the aquaculture sector. The Scotch whisky sector is an example in that regard. Of course, the whisky industry has an interest in doing the work, to promote its activities and influence tax policy, but the spin-off is that we have greater understanding of the sector's impact on various bits of the economy. We are evolving our understanding of what happens in aquaculture, but we are not quite there. That could be worked on in future.

**Claudia Beamish:** The minister and his officials highlighted issues to do with climate change and we had some discussion about the issue this morning. Are you satisfied, as the minister with responsibility in that regard, that the Government has all the powers that it needs to ensure that there is sufficient flexibility to respond to the effects of climate change on salmon and freshwater fisheries?

**Paul Wheelhouse:** You are right to identify climate change as a major, major issue. My discussions with fisheries managers suggest to me that river temperatures and the health of our wild fish stocks are a significant problem. I am not a scientist in that respect, but I understand that there is already a gap between recorded river temperatures in summer and the ideal temperature for fish stocks, and that the problem is getting worse, partly because of the removal of trees along river banks, which has reduced cooling capacity for waters, but mainly because of the environmental impact of climate change.

I will consider the matter and in our consolidated written response to the committee I will say whether we are satisfied that the bill covers those aspects. I take on board your point. As I think I said in a previous meeting, there is an overriding business imperative for many businesses, particularly in the aquaculture sector, to do things that are consistent with resource efficiency. The farm that the committee visited at Lochailort, which uses recirculation, is a good example of that. The approach has a business benefit in that it reduces the risk of infections in fish, and it reduces the water abstraction rate and the risk of environmental pollution. There are positive economic and environmental spin-offs.

**The Deputy Convener:** The final question concerns seal scarer devices. We were advised that the Scottish Government funded the University of St Andrews to develop a new, less damaging scarer. Perhaps in due course you could write to the committee with an update on progress that has been made on that, because the

devices that are used have been raised with us. How do you feel about the need to regulate the use of those devices?

**Paul Wheelhouse:** The issue is important. We receive a lot of correspondence about the licensing of the shooting of seals. That should happen only as a last resort, so we need to explore non-lethal alternatives to allow seal populations to coexist—perhaps not always happily, but generally speaking happily—with the aquaculture sector. I take seriously our obligations in that respect.

About 20 per cent of farms use anti-predator nets; there are also scaring devices, which try to deter seals from coming to an area. If it was acceptable to the committee, it would be sensible for us to write with a detailed response about work that we have funded on the issue, about how we see the role of seal deterrents and about whether regulating the matter would have value.

**The Deputy Convener:** As members have no more questions, I thank the minister and his officials for their attendance. It has been something of a marathon session, but that was entirely appropriate, given the subject's importance and the committee's responsibility. You and your officials have undertaken to write to the committee on a number of topics. I ask for that to be done as soon as possible, because we are working to fairly tight timescales. If we could get the majority of the responses by this time next week, that would help us.

**Paul Wheelhouse:** I am happy to undertake to provide as much as we possibly can on that timescale. I cannot think of any items that would require us to go out for further information, so that timescale should be possible.

**The Deputy Convener:** Thank you for your time.

I ask the people in the public gallery to depart, as we are moving into private session.

12:42

*Meeting continued in private until 13:00.*



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