OFFICIAL REPORT
AITHISG OIFIGEIL

Rural Affairs and Islands Committee

Wednesday 10 May 2023

Session 6

The Scottish Parliament
Pàrlamaid na h-Alba

Wednesday 10 May 2023

CONTENTS

	Col.
DECISION ON TAKING BUSINESS IN PRIVATE	1
SUBORDINATE LEGISLATION	2
Tuberculosis (Scotland) Order 2023 (SSI 2023/93)	2
Bee Diseases and Pests Control (Scotland) (Amendment) Order 2023 (SSI 2023/114)	4
SALMON FARMING	5

RURAL AFFAIRS AND ISLANDS COMMITTEE

14th Meeting 2023, Session 6

CONVENER

*Finlay Carson (Galloway and West Dumfries) (Con)

DEPUTY CONVENER

*Beatrice Wishart (Shetland Islands) (LD)

COMMITTEE MEMBERS

Karen Adam (Banffshire and Buchan Coast) (SNP)
*Alasdair Allan (Na h-Eileanan an Iar) (SNP)
*Ariane Burgess (Highlands and Islands) (Green)
*Jim Fairlie (Perthshire South and Kinross-shire) (SNP)
*Christine Grahame (Midlothian South, Tweeddale and Lauderdale) (SNP)
*Rhoda Grant (Highlands and Islands) (Lab)
*Rachael Hamilton (Ettrick, Roxburgh and Berwickshire) (Con)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Jill Barber (Scottish Government)
Mairi Gougeon (Cabinet Secretary for Rural Affairs, Land Reform and Islands)
Emma Harper (South Scotland) (SNP) (Committee Substitute)
Edward Mountain (Highlands and Islands) (Con)
Malcolm Pentland (Scottish Government)

CLERK TO THE COMMITTEE

Emma Johnston

LOCATION

The Mary Fairfax Somerville Room (CR2)

Scottish Parliament

Rural Affairs and Islands Committee

Wednesday 10 May 2023

[The Convener opened the meeting at 09:43]

Decision on Taking Business in Private

The Convener (Finlay Carson): Good morning, everyone, and welcome to the 14th meeting in 2023 of the Rural Affairs and Islands Committee. Before we begin, I remind members who are using electronic devices to switch them to silent, please.

We have received apologies from Karen Adam, and I welcome Emma Harper, who is attending in Karen's place. Rhoda Grant is joining the meeting remotely.

Our first item of business is a decision on whether to take item 4 in private. Are we agreed?

Members *indicated agreement.*

Subordinate Legislation

Tuberculosis (Scotland) Order 2023 (SSI 2023/93)

The Convener: The next agenda item is consideration of two negative Scottish statutory instruments. I will start by asking for comments on the Tuberculosis (Scotland) Order 2023.

Rachael Hamilton (Ettrick, Roxburgh and Berwickshire) (Con): When I was reading the papers on the TB order, the changes and the policy objectives within it, I was happy with most of it—I know that industry is happy with most of it—but something is niggling at me. I do not feel comfortable with one of the aspects: the 95 per cent reduction in compensation. I am minded to lodge a motion to annul but would like to find a solution to this, if possible.

09:45

My argument around this is based on the responses to the consultation. I know that a number of stakeholders who represent farmers were included in the consultation, but I would like to understand the views of a wider group of people who will be affected by the order. In Scotland, we are not currently affected, as such, by bovine TB. However, if we were to be, this could have a devastating impact on farmers who are already going through a lot of hardship. We should try to find some sort of solution by ensuring that we understand a little bit more about this specific aspect—on which, in fact, the response was not conclusive.

The Convener: Okay. Thank you. Do any other members want to come in?

Certainly, I have concerns about the number of contributors to the consultation. It seems to have been quite low, given what, I would suggest, are quite far-reaching changes in the regulations.

We do have an opportunity. The timescales are very tight, but we have up to 17 May for a motion to annul to be moved. That gives us the opportunity to write with some of the questions that you raise and, potentially, to ask a minister or some officials to our meeting next Wednesday to explore this a little bit further before we take a decision on how to move forward.

Is everybody agreed that we will write to request that a minister or an official attend to answer some of those questions at the meeting next week?

Emma Harper (South Scotland) (SNP): I am not here as often as Karen Adam is, so I would like to clarify: do we need a minister or do we need an official, if it is really just to clarify the information

so that we can proceed and make a better-informed decision?

The Convener: Ideally, we would have a minister or a cabinet secretary, because some of the decisions may be political and officials will just state the position. Ideally, therefore, the best solution would be to have the cabinet secretary, but, failing that, I think that officials would go some way to answering the questions.

Christine Grahame (Midlothian South, Tweeddale and Lauderdale) (SNP): It is a bit unfair if it is just an official, because, if anything quasi-political came up, they would be in an invidious position. It is up to the Government to send somebody—if not a cabinet secretary, a minister, and if they are accompanied by officials, that is all good and well.

Jim Fairlie (Perthshire South and Kinross-shire) (SNP): I am not quite sure where the politics would come in. The country is generally agreed that we are TB free, though there may be issues with certain reactors. As long as we just want clarification of the purpose behind the order and to know that everything has been looked at, I am not sure that there is anything political to worry about.

The Convener: Obviously, we are referring to politics with a small "p", and a decision to reduce compensation by 95 per cent or 45 per cent would be made by a minister or cabinet secretary rather than a civil servant. Rather than an action based purely on scientific evidence, it is a decision that a minister would make.

Rachael Hamilton: Convener, I welcome your understanding of this and the understanding of my colleagues. Your suggestion is great. We must make sure that we get that information, whether from a minister or otherwise. The biggest point is the urgency of this, and we, as a committee, have the opportunity to consider the matter.

Alasdair Allan (Na h-Eileanan an Iar) (SNP): I have no idea what the ministers' diaries are like. I agree that, ideally, it would be a minister, but we really should keep our minds open to the possibility that it would be an official at this very short notice, given the fact that much of what we are looking for is technical information.

The Convener: I agree. Are we all content that we will write with some questions and invite, preferably, a minister or cabinet secretary to attend the meeting next week? If they cannot do so, we will seek to invite an official.

Christine Grahame: We had better send a note of what was said in private. A note saying that queries have been raised could usefully be sent in advance to the Government, if appropriate, and circulated to the committee.

It is a matter for the Government to decide. Committees have priority, and there may have to be—I say this with inverted commas around it—a "political decision" at the end of the evidence session about what they do or do not do with the regulation. Therefore, I am not happy that it would be just an official.

I was not party to the original discussion, although I listened to it, or to the queries that were raised by members around this table. Perhaps they could be circulated and sent to the Government in a letter saying, "These are the problems that we have. It will be a brief session, but we would like clarity," and so on.

The Convener: We are all in agreement. There is no doubt that, ultimately, it is down to cabinet secretaries and ministers to make the decisions on legislation, and they are best placed to answer questions on why certain decisions are being taken. The meeting would be in public, but my feeling is that everybody agrees that we should write to ask for a minister or a cabinet secretary to attend. Failing that, an official could answer some of the questions. Would that be okay?

Members *indicated agreement.*

Bee Diseases and Pests Control (Scotland) (Amendment) Order 2023 (SSI 2023/114)

The Convener: Are there any comments on the Bee Diseases and Pests Control (Scotland) (Amendment) Order 2023?

Beatrice Wishart (Shetland Islands) (LD): We all agree on the importance of protecting native bee populations, but I would have liked a bit more clarity in the policy objectives. They state:

> "this instrument is considered to be a more effective tool".

I would like a bit more understanding of the reasoning behind that. They also reference enforcement by "authorised persons". I would like a bit more detail on who those authorised persons might be.

The Convener: Okay. Thank you. Are there any other comments?

We have more time on the bee legislation, so, if members are in agreement, we will write to the Governement with the queries that Beatrice Wishart has raised. I hope that we will get a response, and we can then revisit the SSI at a future meeting. Is that agreed?

Members *indicated agreement.*

The Convener: I will briefly suspend the meeting to allow for the arrival of witnesses.

09:52

Meeting suspended.

09:54

On resuming—

Salmon Farming

The Convener: Our next item of business is an evidence session on salmon farming in Scotland. I welcome to the meeting Mairi Gougeon, Cabinet Secretary for Rural Affairs, Land Reform and Islands; Jill Barber, head of aquaculture development at the Scottish Government; and Malcolm Pentland, deputy director and lead for marine economy and communities at the Scottish Government. I also welcome Edward Mountain MSP, who is attending for this agenda item.

Edward Mountain (Highlands and Islands) (Con): I thank the committee for allowing me to attend. Before we start this session, it is important that I refer to the register of members' interests. I would like everyone to be aware that, as is stated in the register, I am the co-owner of a wild salmon fishery on the River Spey, along the east coast of Scotland. As such, I have been managing inshore fisheries for over 40 years. The migration routes for smolts leaving and salmon returning to the River Spey are along the east coast of Scotland, where there is no significant salmon farming that affects those fish. I therefore do not believe that salmon farming has any impact on my interest as the proprietor of a wild salmon fishery, but I am keen to make everyone aware of it. I want to be open and transparent about that interest, convener.

The Convener: Thank you, Edward.

We have until approximately 11:30 for questions and discussion. I invite the cabinet secretary to make an opening statement.

The Cabinet Secretary for Rural Affairs, Land Reform and Islands (Mairi Gougeon): I thank the committee for inviting me to provide an update on the progress of our aquaculture commitments as well as to outline our ambitions for Scottish aquaculture. In advance of today's meeting, I was happy to provide a written update on the 2017-18 parliamentary inquiry recommendations. I hope that committee members found that helpful alongside the broader update that was provided. I look forward to answering the committee's questions today.

Aquaculture is, of course, a key component of Scotland's blue economy, with farmed salmon being Scotland's—and, indeed, the United Kingdom's—leading food export. The sector is vital to many of our rural and coastal communities and has much to offer through the provision of, for example, healthy food, food security, skilled jobs, apprenticeships and training programmes. In recognition of the sector's importance, we have a broad agenda, on which we are really trying to create momentum.

We continue to make progress to deliver on sea lice interactions, which is a programme for government and Bute house agreement commitment and a key component of our response to the inquiry. The Scottish Environment Protection Agency is also preparing to launch a second consultation on its more detailed proposals for a new sea lice risk assessment framework, and that consultation provides a further opportunity for stakeholders to input their views on that really important matter.

We are making good progress on reviewing and reforming aquaculture regulation following the independent review of aquaculture consenting that was delivered by Professor Russel Griggs. The Scottish Aquaculture Council, which I set up last year in response to the review, is advising on the delivery of all our commitments to ensure that the sector is supported and innovative and that it operates within environmental limits and with social licence. The council has met three times so far. Its most recent meeting was just last week, when we heard from Professor Maggie Gill, the chair of the Scottish Science Advisory Council, following its independent review, "Use of Science and Evidence in Aquaculture Consenting and the Sustainable Development of Scottish Aquaculture". The review was carried out at my request in response to the issues of science that Professor Griggs raised, and I am pleased to say that the council's report has been published. I record my thanks to Professor Gill and her team for their detailed consideration.

In parallel, a collaborative consenting task group has been established to take forward and pilot key recommendations from last year's independent review of aquaculture consenting. A key element of that work will be improving and streamlining the administration of the consenting process while maintaining those high environmental standards. The working group is to begin trials of a new process later this summer. I take this opportunity to thank the organisations that have committed to that group for their enthusiasm for exploring new processes and for providing the resource for it. We all have the shared objective of ensuring that the consenting system is as effective as possible.

However, the sector can be a truly sustainable success story only if economic growth goes hand in hand with positive outcomes for Scotland's communities and natural environment. Our vision for sustainable aquaculture is being developed to align with and contribute to the outcomes in the blue economy vision, and it will have an enhanced emphasis on environmental protection and community benefit. I am pleased that the Scottish Government's vision for sustainable aquaculture is

in its final stages of development, and I look forward to being able to share a copy of that with the committee.

That is it for my opening statement. I look forward to hearing the committee's questions.

10:00

The Convener: Thank you very much, cabinet secretary. It was 2018 when the Environment, Climate Change and Land Reform Committee and the Rural Economy and Connectivity Committee undertook the investigation into the impacts of aquaculture. I remember clearly it being said—it might even have been me who said it—that

"The status quo is not an option."

We are quite some time down the road from then. A range of the questions today will probably be about whether we still have the status quo of five years ago and whether anything has changed. My specific question is this: what efforts have been made to address the issues around waste from farmed fish on the environment, particularly on the sea bed? Where have there been changes? What improvements have been made on sea bed waste? What are the challenges ahead as we look to increase the output from aquaculture?

Mairi Gougeon: On your initial point about the status quo not being an option, I know that that came out clearly from the committees' inquiries, and it is something that we agree with, as do industry and others. That also came out clearly in Professor Russel Griggs's report on aquaculture. From the information that I set out against the 65 recommendations from those inquiries, which I have provided to the committee, you can see that, although some actions are still under way—I am not saying that we have solved all the problems or issues that were raised—we have made significant progress.

Part of that work has been in relation to SEPA's implementation of its fin-fish framework, which has been taken forward in stages. That work has consolidated SEPA as the key regulator for the environment. Throughout that period, and since SEPA established its framework, we have seen the transfer of responsibility for some of the issues that you were talking about to SEPA—

The Convener: I am sorry to interrupt you, but have you seen improvements? Has there been a reduction in fish farm waste? Have you seen that reduction take place over the past five years? If not, what are the challenges to that becoming a reality? I am talking about specifics. Have we seen an improvement?

Mairi Gougeon: That is what I am coming to, but it is important to outline our position in relation to the framework, because it sets the context in which progress has been made. SEPA has assumed responsibility for the authorisation of discharge of treatment residues from wellboats. That responsibility transferred from Marine Scotland to SEPA. Responsibility for other areas is in the process of being transferred to SEPA, so it will be looking at the cumulative impact of the different issues within our marine environment. So, there have been improvements in that regard. Officials might want to come in on some of the specifics.

Jill Barber (Scottish Government): I will speak specifically on sea bed waste. The new SEPA fin-fish framework, which has been implemented in phases, introduced a new, tighter sea bed standard. That has enhanced predictive modelling, and it needs to have enhanced monitoring alongside it. SEPA is well through implementing that framework, with a lot of farms now operating to the new, tighter sea bed standard.

The Convener: Is that returning any results? When do we expect to see improvements?

Jill Barber: The farms that are on the new standards have to operate to those standards, and some of the other farms are implementing them in phases. It is not just the sea bed standard that is being monitored. For example, we also have an environmental quality standard for emamectin benzoate out at the moment, which is something else that is starting to increase controls on the waste that is going to the sea bed. SEPA is working on a new compliance assessment scheme to go alongside its new framework, so that people can see the progress that is being made and whether it is meeting its sustainability criteria.

The Convener: The next questions are from Ariane Burgess.

Ariane Burgess (Highlands and Islands) (Green): Convener, the responses to your questions answered my questions.

The Convener: Okay. I will bring in Jim Fairlie.

Jim Fairlie: In the Maggie Gill report, the second recommendation for the Scottish Government is:

"Aquaculture (as for land-based food production) is an industry that has environmental impacts and is susceptible to climate change. The Scottish Environment Protection Agency (SEPA) or another part of the SG should consider commissioning independent, horizon scanning syntheses of the international literature to give advanced warning of where regulations may need to change."

You just started to talk about what the sea bed compliance has been. What general improvements have you seen? There was something about the non-compliance with aquaculture regulations and the difference that the

2019 revised aquaculture regulatory framework made.

Mairi Gougeon: We received the Scottish Science Advisory Council report, and we are considering its recommendations and how we respond to it. We had quite a detailed discussion on it at the meeting of the Scottish Aquaculture Council last week, which was very helpful for our consideration.

You are talking about looking ahead and climate change. It is important that the frameworks that we have in place are adaptive and that we are able to look ahead and ensure that we have mechanisms that are flexible to the challenges that we might meet in the future. The farmed fish health strategic framework is important in that regard. A key strand of that work is looking at the challenges presented by climate change, and a few strands of work feed into that. We know that there will be more challenges in the future, so it is important that we have the capacity and capability to deal with them.

Jim Fairlie: It is effectively future proofing it.

Mairi Gougeon: Yes, as much as it is possible to do that. As I said, we need to ensure that we have flexibility to deal with the challenges that we face. In my first response, I outlined the overall SEPA fin-fish framework and the different phases of work that are being taken forward by consolidating SEPA as the overall environmental regulator. That helps significantly in the process.

Beatrice Wishart: Good morning. SEPA is obviously the key regulator here. You have previously stated that SEPA is fully engaged with the Scottish Government on the implementation of the Griggs review recommendations. How would you characterise your working relationship with SEPA?

Mairi Gougeon: I am sorry, but do you mean the Government's relationship with SEPA?

Beatrice Wishart: Yes.

Mairi Gougeon: SEPA is ultimately answerable to the Scottish Government. We have a positive working relationship, and the work that we take forward through the Scottish Aquaculture Council is really important in that. It brings together all the key stakeholders: industry, environmental organisations and the key regulatory bodies that are involved in aquaculture in Scotland. I am really trying to facilitate those wider discussions. Last week, as I said, we had a meeting at which we went into detail about the science report that we received on some of those recommendations. We have positive relationships there.

Ariane Burgess: In the Bute house agreement, there is a commitment to strengthen the regulatory framework around farmed salmon escapee incidents, and it is reassuring that that includes introducing proportionate penalties for fish escapees, which put at risk our wild salmon and other marine life. Currently, the revenue raised from that goes to support wild salmonid conservation and research, which is important. However, I am interested in hearing whether the Government will consider giving some or all of it to the regulating bodies to improve enforcement of regulations, given the high rates of non-compliance by salmon farming companies and the current reliance on self-reporting.

Mairi Gougeon: Your question is in relation to the penalty fees that we receive for escapes. We have already made commitments as to what we would look to do with any increase in penalties, and work on that is on-going. We have also outlined some of the work that we need to do in the implementation plan for the wild salmon strategy that we published earlier this year. We said initially that we would be looking to ring fence any moneys received from that to support research into wild salmon and any work that needs to be taken forward on that. However, that work still needs to be undertaken, so we have not made any firm decisions yet.

Ariane Burgess: I understand that. What I am getting at is that there is a problem with non-compliance and the fact that the industry self-reports. I also understand that there are budget challenges. It seems that, if we brought in proportionate penalties, it would be great if that money went to supporting our enforcement in the sector. I understand that conservation and research are equally important, but given the situation in the salmon farming industry, we need to be stronger and more robust in regulating it.

Mairi Gougeon: If the committee intends to do more work on that and wants to tease out some of those issues in more detail and has thoughts on particular areas, I am more than happy to consider that. As I said, we are undertaking that work. We need to do the work on penalties, but we need to do that in the context of what we said that we would do, and that will feature in any of the discussions that we have in the future.

Alasdair Allan: I will pick up on and amplify that point. Obviously, industry has a role in compliance, whether with regard to escapees or anything else. Without minimising the role of Government and legislation, do you know whether the picture is improving on the efforts that industry makes on compliance?

Mairi Gougeon: Yes, absolutely. We have seen that through the voluntary reporting of data. Obviously, we have some regulatory and mandatory requirements of the industry, but, using mortalities as an example, the industry has voluntarily published that information by the percentage and cause of mortalities. Industry is

also looking at—I am sure that officials will correct me if I am wrong—its community engagement, the code of practice on that and how it can better do that. Although I have outlined some of the actions that we have taken on the overall holistic picture and the consideration of the various issues in the round, and I have talked about the role of SEPA and regulation in that, I think that industry is making those changes on the basis of the various voluntary information that it has provided. We collect all that information, and the Scotland's Aquaculture website is an example of where we have tried to pull all of that information together.

Jill Barber: I will add, as I said in response to the first question, that SEPA has introduced additional monitoring on farms, and, alongside the implementation of the framework, ministers have approved increases to the fees that SEPA is charging, to make sure that there is cost recovery and that inspections are taking place. We can ask SEPA for information for the committee on what the data looks like under the new regime.

Edward Mountain: I have two questions. My first question is about waste. One thing that has been clear in the industry is that the use of antibiotics has gone up by 168 per cent since 2017, and they are mainly used at sea. Are you comfortable that the industry is using such a high level of antibiotics at sea and that one of them, oxytetracycline, is one of the main ones used to treat human diseases, which is building up the risk of overuse of antibiotics? Are you concerned about that?

Mairi Gougeon: On the use of antibiotics, Jill Barber touched on the on-going work in the consultation on the use of emamectin benzoate. Anything that is used has to be within the environmental limits and standards that are in place. Again, that is where the work of the farmed fish health framework has been really important. That group is chaired by the chief vet, and treatment is a theme of the work. If the committee would like more detail on the work that the group is undertaking on antibiotics, I will be happy to provide that.

Edward Mountain: I am concerned that a 168 per cent increase suggests that there are problems with fish health and that we are just using more antibiotics to cover it up, which could be to the detriment of our need for antibiotics.

Mairi Gougeon: Again—

Edward Mountain: However, I will leave that hanging and move on to my other question. The report by the REC Committee, which I was part of, stated:

"SEPA are neither adequate nor effective."

You have made a comment in the charts on recommendations 62 to 65, which covered SEPA, but it does not cover the real problem that the REC Committee identified, which was that SEPA was not carrying out enough inspections, and particularly unannounced inspections. Do you have any evidence that, since the REC Committee's report was published, SEPA has carried out more inspections? If so, have more of them been unannounced, so that fish farms have not been prepared for its visits?

10:15

Mairi Gougeon: I do not have that information on the inspection rate to hand. I do not know whether it is information that officials have, but I will be happy to provide it to you and the committee.

Edward Mountain: Okay. I will leave it there.

Christine Grahame: I want to pick up on the mortality rate, which you mentioned. It is connected to what Edward Mountain said about the use of antibiotics. What is the mortality rate as a percentage over whatever time?

The Convener: Can we leave that for the moment? I will bring you in later when we touch on mortality. There are a few questions about that.

Christine Grahame: The topic is one of mine, but I thought that I would ask the question now, as we are already on it.

The Convener: We will come back to that.

Christine Grahame: Okay. That is fine.

The Convener: I was lucky enough to visit some salmon businesses in North America in April. Faroe Islands salmon appears to be the premium product, because it is seen as being produced in a more sustainable and environmentally friendly way. Norwegian salmon also appears to take a lead, and Scottish salmon seems to be in third place.

Do we need to up our game? Do we need to increase regulation? At the moment, Scotland seems to be an attractive place to have an aquaculture business, because the regulations are more lax than they are in the Faroe Islands and in Norway. What is your perspective on Scotland's position when it comes to regulation and producing the highest-quality product?

Mairi Gougeon: I obviously want Scotland to produce the highest-quality product, but I disagree with the assertion that we are somehow more relaxed in our regulation. We can certainly make improvements to the process, which is why we are undertaking the programme of work that we have set out with the consenting task group to streamline the process. It is not about

deregulating; we want to make sure that our regulation system and consenting processes are efficient, effective and transparent. It is not a fair comparison to say that we sit below the Faroe Islands and Norway when it comes to regulation.

The Convener: Okay. Thank you.

Alasdair Allan: I, likewise, view our product as world class. I have no difficulty in saying that.

As well as being stringent, regulation has to be workable. At present, we have multiple application processes involving the Crown Estate, the Government, SEPA, local authorities and everyone else. Griggs seemed to ask for a single process and document. Can you say more about what the Government is doing to respond to the recommendation on that?

Mairi Gougeon: That feeds into the work that I mentioned in my opening comments—the consenting task group and the pilot projects that it will take forward. You are right: numerous processes and bodies are involved, from Marine Scotland, the Crown Estate and local authorities to SEPA. We know that improvements can be made to the process. When Griggs gave evidence to the committee, he talked about how, in Norway, there is perhaps a one-stop shop, or one person who takes the application and goes to the other bodies.

Through the consenting task group, we are looking to pilot multilateral engagement at the start of the process. That will involve engaging with the community as well as all the bodies that are involved. The group is keen to take that work forward and pilot it with an application at some point. Malcolm Pentland can give a more detailed update on the work that the group is taking forward.

Malcolm Pentland (Scottish Government): The consenting task group that the cabinet secretary mentioned is making good progress on that front. It is developing the co-ordinated consenting process with a single consenting document informed by the multilateral pre-application discussion that Professor Griggs highlighted as being important when he spoke to you in the summer. The group is developing a new blueprint for managing aquaculture applications. In effect, that proposal allows the existing SEPA controlled activities regulations permit and the local authority planning process to run side by side rather than sequentially.

The consenting task group and the advisory group that supports it met recently and they are supportive of where that work has got to. The next step, which will happen between now and the end of June, is to take the blueprint and turn it into a more detailed draft management framework. At the same time, industry colleagues who are involved in the work are looking to identify sites where that can be trialled. The intention is to begin live trialling in early July.

Beatrice Wishart: Can you explain the blueprint a bit more? There has been the idea of a one-stop shop. Will that still be possible or will applications have to be multilayered?

Malcolm Pentland: At the moment, the group is looking at what can be done within the existing legislative framework. Russel Griggs has been very helpful and he has been involved in advising the group on its work. Through the streamlining of the processes so that they run side by side, any problems can be identified at the outset, rather than each individual party going through their individual processes. As I said, there has been real progress on that with the stakeholders that we have brought together.

As Professor Griggs's report highlighted, there had been real difficulties with relationships and trust among some stakeholders. We have those stakeholders coming together and talking about their perspectives on the process and the challenges that they face. Importantly, we are thinking about how to come up with solutions together. Over the nine months, there has really been a change. We have participants referring to the positive camaraderie in the group, where we have SEPA, local authority planners, Government and industry.

Beatrice Wishart: Can you clarify the timescale?

Malcolm Pentland: The intention is to start some live trialling at the start of July.

Beatrice Wishart: Where will that lead? What is the timescale after that?

Malcolm Pentland: I think that we will be looking for outcomes towards the end of the calendar year, with assessment of how the trials have gone, what has worked and what might not have worked.

Beatrice Wishart: Okay. Thank you.

The Convener: Emma Harper is next.

Emma Harper: My questions have been covered, convener.

The Convener: Okay. Jim Fairlie is next.

Jim Fairlie: Malcolm, will you clarify something? Maggie Gill's report is new—it has only just been released—but she highlights what Griggs said about the creation of a central science evidence base. Is that what you were referring to when you talked about the blueprint bringing people together, or is that a separate part of the report?

Malcolm Pentland: That is a separate strand of the work in response to the Griggs review, but we

are prioritising both aspects at the same time. They are running in parallel and they may well come together.

Jim Fairlie: I asked that question because there are concerns about the siting of new fish farms. Given that salmon is the biggest fresh food export from the UK bar none, that it accounts for about £362 million of gross value added to the Scottish economy alone and that it employs 2,391 people in the most rural and remote areas, it is a hugely valuable industry to us and we want to make sure that it can move forward and continue to thrive. What is the Scottish Government doing to address the concerns about the siting of new farms? Do we need a central scientific evidence base that is trusted by all in order to allow the siting of new farms?

Mairi Gougeon: On the science, the Scottish Science Advisory Council's report highlights some of the intrinsic problems that exist and how different science can be used by different people. We need to consider those issues. Obviously, we have to consider the recommendations that we have received on how we communicate that, which will probably help us to find a way through. That is exactly why we asked the advisory council for its report.

A lot of that will also be helped by the work of the consenting task group and what it is trying to do to establish multilateral engagement at the start of the process, as well as all the other pieces of work that we have touched on this morning. SEPA is looking to introduce the new sea lice framework in order to look at the impacts on the marine environment holistically through its own framework. All those strands of work are important in addressing that point.

Jim Fairlie: I reiterate that aquaculture is a massive part of the economy and it is vital that we allow it to continue. My understanding—to be honest, it is quite limited—is that disparate bodies have different views on whether it is a good thing. It is important that we understand that it is really important to our economy and our rural jobs. We have to nurture it, but we must find the right way to do that.

I go back to what the convener said: if we are sitting in third place, we want to be first. The question is how we can get to first place by increasing the volume that we can produce in this country. That is probably more of a comment than a question.

The Convener: I absolutely believe that Scottish salmon is the best salmon in the world and that we have one of the best export products.

What role does the Scottish Government have in ensuring that those who are opposed to aquaculture and the companies that are involved in it can come closer together? The argument is quite polarised at the moment. Aquaculture companies have made some fantastic advances in rearing fish onshore for a longer period, which means less reliance on antibiotics or whatever. The fish then go into our fantastic Scottish seas, which is what gives Scottish salmon that unique flavour and quality. The Scottish seas and the waters around our coast play the biggest part in our producing a world-class product.

What role do you have in your work with aquaculture and communities to ensure that that message gets out there and that the polarised argument is addressed?

Mairi Gougeon: It is a really important role. I affirm that I absolutely agree with the points that you and Jim Fairlie made about the sector's importance. It is widely recognised that we have a world-class product, but we have to make sure that the industry operates within environmental limits. We want to see that greater social licence as well, which is why the work that will be taken forward in our vision is critical.

That is where some of the recommendations that came out through the Scottish Science Advisory Council report are important. It talks about the communication of some of the work that is happening and the potential improvements to be made. We want to give our full consideration to the recommendations and we take that work very seriously. The issues include how the science is communicated and how we can work better with communities, but it is about how all those different strands of work come together.

The consenting task group has a key role in that regard, because it is about involving communities and not just the industry and the regulators. The work that we are taking forward through the Scottish Aquaculture Council also plays a role. It is important to bring all the different voices round the table so that we can really start to talk about and find a way through some of the difficult issues that we know we might face.

Rachael Hamilton: Cabinet secretary, I am not sure whether it was your policy decision or a collective decision by the Scottish Government, but it was decided to lower from six to four the number of sea lice that are permitted before intervention is mandatory. One of the reasons that you have given for not pursuing that commitment is that a treatment

"could contradict a vet's view on the best option for the health and welfare of the farmed fish."

I would like you to explain when it would not be in the salmon's interest to deal with sea lice. Are you committed to reviewing that decision in the future? What is your timeline for that?

Mairi Gougeon: I hope that I made my reasons for that clear in my response to the committee. By no means have we said that we will not proceed with that at all, but it is more pragmatic to let some of the work that I have outlined today bed in before we look to potential implementation.

One of the key pieces of work is SEPA's sea lice framework, and there is due to be another consultation on the impact of that on the back of a consultation that was held last year. That framework will potentially have an impact on the average sea lice numbers that could be permitted. It is important that we work through and complete that piece of work before we look at revisiting the decision. I hope that it is clear from my report that the industry's levels are, largely, far below our minimum thresholds anyway.

10:30

For those reasons, as well as the one that you set out, we decided not to proceed with the decision at this point. We will, of course, continue to keep it under consideration as the new framework beds in and we see how it is operating. I am sorry that I cannot give you a more definitive timescale at the moment. We are due to have the consultation, so I cannot give a precise date for when the framework will be in place. We need to go through the processes first.

Rachael Hamilton: Okay. At present, the average level of sea lice is around four and a half. I do not know whether you have a different figure, but what is your ambition?

Mairi Gougeon: We want to see as few as possible. We have the minimum thresholds and, as I said, we will keep them under review. Industry has to report the numbers—there is a mandatory requirement for it to do so, and the numbers are posted a week in arrears. As I highlighted in my previous response, the vast majority are already below our minimum thresholds. The work that we are taking forward through the sea lice framework will be critical. We really need that to be embedded before we consider whether it is appropriate to continue to lower the thresholds.

Rachael Hamilton: It sounds as though you are quite confident about the reporting and the verification process. What is in place to ensure that there are checks on and verification of the figures?

Mairi Gougeon: As I said, there is a mandatory requirement for industry to publish the figures. The fish health inspectorate has a role to play in that. Its role is to audit that information, and it also undertakes inspections. We therefore inspect, audit and check.

Rachael Hamilton: Is there any point in the life cycle of the salmon, up to the finished product, that would alert you to any loopholes in the reporting of sea lice levels?

Mairi Gougeon: I have not been alerted to any potential loopholes. As I said, the fish health inspectorate undertakes inspections and monitoring.

Jill, do you have any further information on that?

Jill Barber: Yes. Rachael Hamilton asked why we might want to not treat fish that have a higher level of sea lice than we might like. Large farmed salmon can handle a number of adult lice, and if they have other things going on, such as gill health issues, we might not want to treat them, because doing so can cause them stress and it can cause mortality. That is a reason why a decision might be taken not to treat the sea lice immediately.

A reason why sea lice might not be reported is that, if salmon are being treated with chemicals, it is not possible to use certain chemicals to count them. As Ms Gougeon outlined, the fish health inspectorate audits the reports. There can be some small gaps in the data, but it is important to point out that SEPA is looking at the monitoring and reporting of this as well. Some really good technologies for automatic counting are starting to be trialled whereby issues such as fish being treated so that they fall asleep will not matter so much and you can have constant lice counting on the farm.

Rachael Hamilton: I presume that you are talking about the withdrawal period before sale.

Jill Barber: Yes.

Rachael Hamilton: Convener, would you rather that someone else cover the mortality issue?

The Convener: Yes. We will move on to that, but I have a supplementary question on sea lice. We are seeing in some businesses a move to incubate or grow smolts for a longer period in contained units onshore. The reason for that is that you then get larger fish going into the sea cages, which means that the impact of sea lice on the fish is not so big.

You have said that larger and healthier fish going into the sea can perhaps handle five, six or seven sea lice without any significant adverse impact. What calculation is done on the overall load of sea lice in those cages? What consideration is given to that? We may not have to treat them with ivermectin or whatever, but it may mean that there is a far heavier load of sea lice in the sea. Is that a consideration when you look at minimum and maximum levels of sea lice?

Jill Barber: At the moment, the farmed fish health regime looks at the promotion of farmed

fish health. Importantly, the SEPA framework that is under development looks at the levels of sea lice to protect the environment—the number of fish, the average number of sea lice and what is emitted—as well as, very importantly, the environmental conditions and the salmon populations. The changes to the farmed fish health framework was paused because the levels of sea lice that are appropriate for the environment are being assessed under the SEPA modelling framework.

Christine Grahame: I will move on to the issue of mortality, but I will start with a quote from the review by Professor Griggs that was published in February 2022. He stated:

"Throughout the evidence gathering stage of this review a lot of what I have heard and seen resonates with other reviews of this type I have carried out."

He went on:

"However in all the reviews I have conducted over the years, there are two characteristics that I have never come across before".

One of those was:

"All the people and organisations that I have met with or had input from think that the current regulatory system for aquaculture is not fit for purpose".

That is significant. This is a man who has done lots of reviews, and that seems to have taken him by surprise. It is quite a shocking statement.

That brings me on to mortality. I am interested in the welfare of animals, and we are talking about the factory farming of fin fish. What are the most recent figures for the mortality rate in salmon farming?

Mairi Gougeon: It can vary between 15 per cent and 25 per cent.

Christine Grahame: Who provides that data to you?

Mairi Gougeon: The industry publishes the mortality rates by percentage and cause. That is not mandatory, but the industry has a mandatory requirement to record the information on mortality.

Christine Grahame: This is a new game to me, but I understand that major international companies are involved. Who are those companies? They are not small businesses; they are major international companies. Can you name them for me? I do not know who they are.

Mairi Gougeon: Do you mean some of the key industry bodies and companies that we have?

Christine Grahame: Yes—who are the key international companies that do factory salmon farming in Scotland?

Mairi Gougeon: We have Mowi, Bakkafrost, and Scottish Sea Farms.

Christine Grahame: Those companies are actually monitoring themselves and providing the data. They may have a mandatory obligation in law, but they are not independently assessed to establish whether the data is correct.

Mairi Gougeon: The fish health inspectorate undertakes risk-based inspections and ensures that the information that is provided is accurate and correct.

Christine Grahame: Let us take the maximum mortality rate, which is 25 per cent. How is that checked? I am trying to find out how that is verified independently, because I am not too happy about self-regulation. How is it done? When the figures come in, does someone in the fish health inspectorate say, "I think we should go and check all this stuff on site," or do they simply check the data? How do they do it?

Mairi Gougeon: Jill Barber can talk through the process that is followed by the fish health inspectorate and its role.

Jill Barber: To be clear, some of the mortality reporting figures are collected through Scottish Government official statistics on how many fish survive to harvest. That is the most accurate record that we have, going back to 2002, on the overall survival of fish. Over and above that, fish farms are statutorily required to record fish farm mortality and keep records. Those records are inspected every time the fish health inspectorate is on a farm.

On top of those measures, we have introduced voluntary reporting thresholds. By and large, everybody meets those, because they are in the independently audited code of practice. If the fish health inspectorate gets a notification of mortality, it will review all of that information, speak to the farmer and take a decision on whether it needs to do an inspection, which, quite a lot of the time, it does.

Christine Grahame: So, it is the records that are inspected.

Jill Barber: No—the inspectorate also inspects the fish every time that it is on site to make sure that what it sees tallies with the records.

Christine Grahame: We are looking to get actual data. You could go in and say, "Well, the fish are not too bad today," but I have seen sea lice, and they can do horrible things to the fish. How do you know that the figures are right? That is what I am getting at. This is very important. You have given a figure of 15 to 25 per cent, which is a loss of quarter of the stock.

Jill Barber: There are movement records on to the farm, movement records off the farm and mortality records. Also, when wellboats are used on the farm, they have fish counters. Everything

that is moved is counted, so you can look across records to know how many fish are being put on to a farm and how many mortalities there are. That is audited. If something jumps out, the fish health inspectorate will see it.

Christine Grahame: This is my final point, as I know that others may want to come in. Let us say that I accept the figure of 25 per cent, although others may or may not. Are you content with that figure for animal welfare purposes?

Mairi Gougeon: We would not be content with that, and I do not think that anybody would be content with it, if you were to look at the figure in that way. Obviously, we want mortality levels to be at the absolute lowest possible level. A variety of factors can have an impact throughout the cycle, but we would not be content with that and would want them to be at the absolute lowest level.

Christine Grahame: How do you reduce the level?

Mairi Gougeon: We do that through some of the pieces of work that we are taking forward. A key strand of work that is being taken forward through the farmed fish health framework is on mortalities. That has been divided into 10 broad categories. In some years, we see higher rates than in others because of different pressures. Over the past year, we have seen more gill damage from micro jellyfish, but it is too early to say whether that is a trend.

We work with the Sustainable Aquaculture Innovation Centre through the farmed fish health framework. It has been doing work in relation to harmful algal blooms as well. A big step forward has been the standardising of the data that we can publish in relation to mortalities. For some issues, however, there is no quick or easy fix, so more work must be undertaken. It is about identifying what needs to be done and where the challenges might be in the future.

Christine Grahame: Professor Griggs asked for independent scientific evidence. That was one of his calls. Are you pursuing that?

Mairi Gougeon: Yes. We have already touched on the Scottish Science Advisory Council report and the recommendations that it provided us, which we are considering. We asked for that review specifically because of the science recommendations in Griggs's review.

Edward Mountain: I can put some flesh on the figures that Christine Grahame referred to, just to help you, cabinet secretary. In 2016, 22,000 tonnes of salmon died in fish farms. In 2021, the figure had risen by 35 per cent to nearly 30,000 tonnes of fish. If you were to put that on lorries that were touching each other nose to tail, they would stretch for nearly 11 miles—that is 11 miles of articulated lorries of dead fish.

In its report "Salmon farming in Scotland", the Rural Economy and Connectivity Committee said that mortalities were "too high" and made some recommendations in that regard. I have looked at the information that you provided to this committee, and I do not see that any of those recommendations have been taken on board. The suggestion from the industry was to move fish farms further offshore to prevent gill disease and infections. Another suggestion was not to allow farms where there is high mortality to continue—they are still continuing—and another was to consider a red, amber and green system for farms that are performing or not performing whereby, if they got to amber, they would have to reduce their production, and, if they got to red, they would have to cease it. Do you not think that those were wise recommendations by that committee that would protect the industry from itself? Will you push forward those recommendations?

Mairi Gougeon: Of course, we take all recommendations from committee inquiries seriously. We have made significant progress against a lot of the recommendations that have been set out. As I outlined in my response to Christine Grahame, there are a variety of reasons that can lead to the rise in the figures. We are not content with the figures, and I do not think that the industry is content with them either, which is why the work that we are undertaking to try to tackle some of the issues is important.

10:45

Edward Mountain: You are saying that you are content to let mortalities increase by 35 per cent. The industry will say that it is producing more fish and that therefore accounts for more mortalities. However, compounding an error surely is not the way forward. I do not understand any industry that would accept a 25 per cent mortality rate. I understand that, with farming, there is a certain amount of mortality, but are you really happy with 25 per cent? Do you think that that is good for the environment around our coastlines or good for the industry?

Mairi Gougeon: I have already responded to that in answer to Christine Grahame's point. I am not content with the figure. We want to see mortalities at their lowest possible level, as I think I have made clear to the committee today. That is why this work is important.

You talked about a jump in the figures. The average number has stayed relatively constant over the past five years. I mentioned a specific example that we believe may have led to an increase in mortalities over the past year, which is

why that needs to be investigated. The pieces of work that we are doing are critical in trying to address that. To be crystal clear, we want mortality to be at the absolute lowest possible level. We are not content with the current position, and I do not think that industry will be either. That is why we have to tackle those challenges.

Edward Mountain: The level has remained stubbornly high and, over five years, it has not reduced. That means the status quo to me.

Jim Fairlie: I want to get some perspective here. The survival rate for wild Atlantic salmon is somewhere between 1 and 3 per cent. For farmed salmon, it is about 85 per cent. There will be extenuating factors and extraordinary occurrences that the cabinet secretary mentioned, such as jellyfish and algal bloom.

Edward Mountain has just quoted numbers of dead fish. My question is on that issue and is quite an odd one. What do the farms do with the dead fish?

Mairi Gougeon: That is set out in regulations—they need to be disposed of in a certain way. Jill Barber might be able to give a bit more information on that. It is probably important to mention how some of the figures are recorded. Some of the mortalities are not necessarily an indictment or reflective of the husbandry of those animals, as they include things such as sub-optimal ova.

I hand over to Jill Barber.

Jim Fairlie: [*Inaudible*.]—is not an option. We know that.

Mairi Gougeon: Yes.

Jill Barber: How the mortality occurs will determine what the fish can be used for. Some fish will have to be destroyed in line with animal by-products legislation. If, for example, you are processing fish and have extra waste, you can use that as part of the circular economy and do other things such as turn it into fish meal or fish oil.

To pick up on the points about mortality and some of the figures that were reported in the media, those are weights. The best statistics to look at are the Scottish Government official statistics, which show the survival percentages over the years. Those statistics have a long-standing data set that does not just look at changes in weights from quarter to quarter, which can look as though they are going up and down a lot but which might be explained by a variety of reasons.

The discussion on mortality is really challenging. There is a bit about a fish being really efficiently farmed, as it is a smaller animal. It is not like a mammal that has one offspring to look after; it lays lots of eggs to try to make sure that some of them survive. It is therefore challenging to compare mortality figures between species, but I think that we can all agree that they should be as low as possible.

Jim Fairlie: I accept that mortality levels should be as low as possible. Although I hate to sound callous to people who view fish as sentient, surely, as part of the process, there is an opportunity to turn the by-product into fish fertiliser and other products. I see Edward Mountain shaking his head in disgust. We do not want mortality, but mortality is going to happen, because immortality is not an option. If you are going to have farmed animals, fish and livestock will die—that is just part of the process. That can be used in another way. Is that already happening in the industry?

Jill Barber: Yes, the by-product is already being used in other ways. We are trying to do more of that. How you use it depends on what happens to the fish, but the Sustainable Aquaculture Innovation Centre, for example, is certainly looking to support projects on that.

Jim Fairlie: Thank you.

The Convener: I will make a couple of points before I bring Christine Grahame back in. We are talking about upwards of 25 million fish a year that die. Is the figure of 25 per cent accurate, or is mortality underreported, given that it is not a statutory requirement to report mortalities? How does that compare with other aquaculture industries around the globe? Is 25 per cent an accepted level? Finally, what mortality level do you find acceptable? I know that you want it to be as low as possible but, given that the Government has been looking at the issue for five years, what level of mortality do you find acceptable? We understand that there will be mortality, but what level is acceptable to the Scottish Government?

Mairi Gougeon: Again, it is not possible for me to give a definitive figure for that. We want the level to be as low as possible. With some of the figures that you talked about, it is hard to say, because there are things that we cannot predict. I talked about what could have been a specific event last year; we do not know whether that could become a trend that would become more of an issue.

I want to correct your point that it is not mandatory to report mortality. The industry must record it—that is a mandatory requirement. We talked about the inspection regime, how that information is collected and the role of the fish health inspectorate. I want to be clear on that point.

The Convener: Okay.

Mairi Gougeon: I do not know whether we have the figures for comparison with the industries in

other countries. Perhaps we can provide them later.

Jill Barber: Alongside Norway, we are seeing potentially small increases in farmed fish mortalities. It is not a Scotland issue but a sector-wide issue.

The Convener: Generally, though, if we are to accept that 25 per cent is fairly accurate, and although we want it to be as low as possible, you must have a figure in your head for what is acceptable. We all more or less agree that a 25 per cent mortality rate is unacceptable, because it means that 25 million fish effectively leave the food chain. Give or take a few per cent, what level would be acceptable? There has to be a target. Is it 10 per cent? Is it 20 per cent? We have been looking at this for years and years. What is a rough idea of what the mortality rate should be?

Mairi Gougeon: I come back to my previous response. It is not possible for me to give a definitive figure for what our mortality rate should be. Jill Barber highlighted that other countries are experiencing similar problems. We want to work to reduce the figure to the lowest possible level. That is why the work that we are doing through the farmed fish health framework and the other strands of work to try to identify the issues is vital.

The Convener: Yes, but if the status quo of 25 per cent mortality is not acceptable, you must have a rough idea of what the rate should be. If we look at the livestock industry and see that there is a mortality rate of 10 per cent, we want to improve that and get it to 5 per cent mortality. Surely there is an idea in the framework—maybe not a definitive target but a direction of travel—to get us closer to whatever the figure is. There must be some indication of what that might be.

Mairi Gougeon: That is the third time that you have asked me the question, convener. I cannot give a definitive response. Of course, we want to do what we can to drive down the rate from the current figure. It is in our interest and the industry's interest to do so.

The Convener: Okay. Thank you.

Christine Grahame: I want to pick up on Jim Fairlie's comments. Fish are sentient, and they feel pain. It is not a sudden death. I am not talking about them having a heart attack and dying; it is a painful process when fish die in factory farms. If there was 25 per cent mortality in a flock of 400 sheep, that would mean saying goodbye to 100 of them. That puts the dynamics of it into some kind of perspective.

I absolutely support salmon farming in Scotland, but I want it to be done with the welfare of the animals at heart as well as the production of a good product. There are then the ancillary matters that Edward Mountain mentioned—we have accidentally become a team. The antibiotics that are put in to combat the conditions in which the fish are kept and that lead to an increase in the lice are, in fact, a bad thing in themselves.

I just wanted to make that comment in reflecting on what my colleague Jim Fairlie said, because I do not find the figure of 25 per cent acceptable. Convener, if there is a 10 per cent drop off in livestock, out of 400 sheep, we would have 40 of them perishing. I cannot imagine that that is correct by a long shot.

The Convener: That leads on to the next question. We are now halfway through the 10-year farmed fish health framework, which was, as we know, established in 2018. What is your opinion of its performance to date, and can you set out some of the key achievements?

Mairi Gougeon: Yes—absolutely. In previous responses this morning, I have touched on the work that has been undertaken through the farmed fish health framework. You are right: we are five years on from its establishment. There was a refresh in 2020. The group is chaired by the chief vet, and it brings together the producers, regulators and innovation centres. Fish vets are part of that body, as well. At the time of the refresh, the group looked to refocus its priorities, and the key priorities to focus on were climate change, looking at treatments, and trying to address mortalities throughout that time.

I mentioned in a previous response that one of the key achievements within that time has been the standardised reporting of mortalities. The group has worked on and produced the 10 overarching categories into which they would fall. Work has been done in partnership with SAIC, as well—SAIC has been leading on that—in looking at some of the issues that we know that the industry faces. For example, that work has looked at harmful algal blooms. They are also looking at potentially trying to remove the barriers to vaccination.

A lot of work has been undertaken, and a lot of work is on-going. If the committee would like a fuller update on the work that has been undertaken through the farmed fish health framework, I would be happy to provide that.

The Convener: I am just wondering about the key achievements. What one or two achievements have resulted in an improvement in the issues that were reported?

Mairi Gougeon: I have already made points about the work that has been done on the categorisation and on mortalities. I do not know whether officials wish to make further points about their work.

Jill Barber: A big part of the Scottish Government's role in that was the review of the farmed fish health sea lice policy, the reduction in the sea lice numbers, and the introduction of the sea lice reporting legislation.

Emma Harper: Good morning to you all.

Jill Barber just mentioned sea lice. I am interested in sea lice interactions with the wild salmon population. I have loads of pages open here, because a lot of work is being done by the North Atlantic Salmon Conservation Organization. The document that I have in front of me is a Government document that talks about the impacts of lice from fish farms on wild Scottish sea trout and salmon. There is lots of scientific information here about the impacts of sea lice on sea trout and wild salmon. Lots of modelling has been done, as well as observational and experimental studies. It is quite comprehensive, and work is being taken forward to look at the impacts of sea lice on wild salmon.

I am interested in hearing about what progress has been made to look at how we manage the impact of farmed salmon lice on the wild salmon population.

Mairi Gougeon: A few pieces of work have been undertaken that are relevant. We have talked a bit this morning about the development of the sea lice framework and how that work has been progressing. We have had the salmon interactions working group report, which we responded to. That response is a key part of addressing some of the recommendations that were made in that report.

On wild salmon, we had our wild salmon strategy, and a wild salmon implementation plan was announced earlier this year. Across five themes, that made 60 recommendations on how we can address the different pressures that affect wild salmon. One pressure is sea lice but, broadly, 12 pressures that affect wild salmon populations have been identified.

11:00

The development and delivery of the sea lice framework is a critical piece of work. We had a consultation on the framework last year, and another consultation, on its impacts and what those might be, is due to be issued soon. It is a risk-based framework that will look at the cumulative impact of a number of pressures through the modelling that it uses. That will be a big step forward in addressing some of the issues that we face.

I am sorry, but I do not know whether there is more detail that Jill Barber wants to add to that.

Jill Barber: No.

Emma Harper: You talked about the 12 pressures. Lots of variables can impact the health of farmed salmon and wild salmon, such as water temperature and algae blooms. There is no one solution to how we can address the issue of sea lice on wild salmon. In relation to the framework, does further work need to be done to strengthen any regulations?

Mairi Gougeon: The implementation plan sets out where that work needs to be taken forward. That means looking at pressures on wild salmon in the round. A delivery group has been set up to oversee that work and the delivery of the recommendations. It will produce an annual report to highlight the progress against each recommendation.

This is not about just one piece of work in tackling one pressure. We have to make sure that we do what we can to tackle the other factors that we know affect wild salmon populations. You mentioned some of those. They include water temperature, disease, sea lice and predation—there is a whole host of things that we need to get to grips with and ensure that we act on.

Innovation is a really important part of addressing some of the issues that relate to sea lice. We know that we need to undertake research. We have to identify the gaps in our information. The implementation plan highlights some of that work and where we can better work with other organisations to try to address some of those evidence gaps and undertake the necessary research.

Our piece of work on sea lice will, I think, help to address some of the issues that we have seen. It will take a holistic view and help to tackle one of the pressures that has been identified.

Emma Harper: There are no salmon farms in Dumfries and Galloway, but a lot of work is being done to look at how wild salmon move. Galloway Fisheries Trust is one of the groups that are doing a lot of really good research. The same applies to the River Tweed. Is that part of the engagement with local groups and local people that you are talking about—using their research and evidence to help to inform how we can address the issue of sea lice on wild salmon?

Mairi Gougeon: Yes—absolutely. We are looking to expand the counter network so that we can get to grips with some of that data. The implementation plan is important in highlighting where that further work needs to be done on research, innovation and data collection.

We know that we cannot do that in isolation. It has not been possible for us to get all the information that we need on our own. We are working with the fisheries boards and trusts, as well. They have a vital role to play in that, and they

are among the key stakeholders that make up part of the delivery group. We want to make sure that we are engaging with people, because we all have a role in helping to deliver on the recommendations.

Rachael Hamilton: You may be aware that the Institute of Fisheries Management has released a statement that says that salmon are at risk of extinction. The matter is therefore an urgent one that needs to be dealt with. NASCO has also released a statement, which says that we need to be committed to using innovation and technology. From looking at some of the Scottish Government documents, it seems that support from Marine Scotland is needed to use that innovation and technology. What is holding us up in ensuring that the Scottish Government is not aiding the extinction of wild salmon, but is helping to preserve that iconic species?

Mairi Gougeon: You are absolutely right. The salmon is an iconic species for Scotland, and we need to do absolutely everything that we can to prevent a further decline in its numbers. We are not holding anything up in trying to address the challenges that we face. The stage that we are at now is based on the work that we have done in trying to identify what the key pressures on wild salmon are. That is why we published the wild salmon strategy and then published the implementation plan.

It is all very well to have a strategy, but we need to deliver on what we set out in it. That is where the 60 recommendations are key, and that is why having a delivery group, which will ensure that we deliver against those recommendations, will play a really critical part, as well. The group has already had its first meeting and, as I have said, we will report annually on where we are at with each of the recommendations.

You talked about innovation. That is really important. That is why we support innovation and fund it. Through the marine fund Scotland, we have provided about £7 million-worth of funding for innovation and technology. We also work with the likes of the Sustainable Aquaculture Innovation Centre, which gets funding through the Scottish Funding Council and takes forward a number of important projects.

We are therefore not holding anything up. We want to address the challenges that we know salmon farming faces, but some of them are more difficult to deal with. There is the impact of climate change, and there are all the other challenges that it faces. That is why it is important that we try to take action on all those fronts and do what we can to meet the challenges that we know exist.

Rachael Hamilton: It would be worth having a commitment to a timeline for some of the serious ambition that the Government may have to protect salmon.

Mairi Gougeon: I would be happy to provide the committee with more information on the implementation strategy, if it would find that helpful. We have timelines and reporting dates set out in that strategy that might be helpful for the committee to receive.

The Convener: Thank you.

The Rural Economy and Connectivity Committee and the Environment, Climate Change and Land Reform Committee both felt that there should be greater use of the precautionary principle. The first stated:

> "The Scottish Government should provide strong and clear leadership in ensuring that the precautionary principle is applied, producing appropriate policy and guidance documents as necessary."

Furthermore, the ECCLR Committee considered an independent assessment of the environmental sustainability of the predicted growth of the sector to be necessary.

There was a move to take fish of a heavier weight or that are older onshore. We talked about moving them offshore so that the time in which the fish are in cages in the sea is reduced. The impact of that might be to reduce the use of chemicals, to reduce mortality, or whatever. However, given the statements that I have just given, what work is being done to look at the additional impact of sea lice? Sea lice do not need to be controlled to such levels with older fish. What impact might that weight of sea lice load have on wild salmon populations? Is that something that you are looking at?

Mairi Gougeon: Yes—absolutely. Those are exactly the issues that we are looking at through the sea lice framework and the work that is being taken forward from that.

The Convener: Okay. Thank you.

Alasdair Allan: The issue of escapes from fish farms has been touched on. As well as regulation, the industry bears its own responsibility for that. Can you say a bit more about your plans for dealing with the specific issue of escapes and how you are going to tackle them in the future?

Mairi Gougeon: That is one area in which we are looking at strengthening the regulatory regime. I do not know whether the officials can give you more of an update on where that work is at at the moment. We have the code of practice that was published in 2021 and introduced essentially for the prevention of escapes. That is work that we need to do and that we will be taking forward. As I said, I do not know whether the officials have any further information.

Malcolm Pentland: One of the specific actions in the wild salmon strategy implementation plan is the strengthening of controls to reduce escapes and to explore the introduction of penalties, as was touched on earlier, with the ultimate aim of redistributing income to support salmon conservation and research. We are looking to have the technical standard on escapes revised during the next 12 months.

Jill Barber: Through our working group, we have been working with the sector and others to update the technical standard to make sure that the equipment that is used is suitable for containing fish and can withstand storms, for example. We want to update it in line with the Norwegian standard.

Alasdair Allan: One thing that has come up—or that has certainly been put to me—is that, when an escape takes place, it needs to be reported and information needs to be made available to the community in real time rather than weeks or months after the event. What can be done practically in regulation to make sure that the reporting to the community and other interests around about is done quickly?

Mairi Gougeon: Those are definitely issues that we want to take forward as we look at and revise the regulatory regime. I am more than happy to take that on board and to consider it as part of that work.

Rhoda Grant (Highlands and Islands) (Lab): How will the Scottish Government ensure that the benefits of aquaculture extend to local communities? Specifically, how can community views be taken into account when considering planning permission for fish farms? When I say "community views", I am including the views of other users of the marine environment.

Mairi Gougeon: That is a really important point, and it is something that we are keen to take forward through our vision for aquaculture, too. We recognise the important role that communities play and want to make sure that their voices are heard, and we are looking to enhance that through the vision for aquaculture. That work is under way.

We talked earlier in the session about the consenting task group and its work, which has a strong focus on communities and how we can engage with all the relevant parties at an early stage in the process. Of course, we will want to monitor how that and the applications pilot work over the summer, and we will take any learning that we get as a result. At the moment, communities have the ability to put forward their views through the planning process, but those other bits of work will really help to enhance a community's role and involvement as early as possible in the process.

As for the community benefits, we have the sea bed lease fees from Crown Estate Scotland. Those fees, which will be increasing, go to local authorities for community benefit purposes.

Rhoda Grant: One of the other benefits of fish farming is well-paid jobs in remote rural areas. I would therefore highlight how we might be able to turn around some of the depopulation in those areas. Cabinet secretary, you will be as aware as anyone that housing is a huge issue. We see tiny houses or houses that would be almost worthless elsewhere going for phenomenal amounts in some areas, simply because they are beautiful places to live in. Young people employed by fish farms are really struggling to get a home and to stay in the communities in which they were born and brought up. Is the Scottish Government doing anything to aid and assist young people in getting a home, and is it working with the fish farming industry on that?

Mairi Gougeon: The member is absolutely right about the well-paid jobs and, in particular, the importance of aquaculture to some of our most remote communities and island communities. Work is on-going on this matter, and we are working with the industry to address some of those challenges.

You are, without a doubt, right about the pressures of housing. A couple of years ago, I visited Colonsay specifically to meet the community there and talk about a housing project that was being done in conjunction with Mowi but that was also using some of the funds that we had made available. It is not the jobs in an area that are the problem, but the housing that is holding people back from moving into communities.

Those pieces of work are really important, and the approach is definitely something that we want to continue to develop. Apart from the project in Colonsay that I visited, there is, I believe, a project in Rum that is doing the same thing. All of that will factor into the work that is being taken forward through the remote rural and islands housing action plan. That work is being led and developed by the Minister for Housing, but I will, of course, engage closely with him on it as it develops.

Rhoda Grant: Okay. Thank you.

11:15

The Convener: I apologise to Rachael Hamilton, whom I had meant to bring in at question 9. Do you want to ask your supplementary question now, Rachael?

Rachael Hamilton: I asked it in relation to question 8, so it is fine, convener. However, I would like to pick up on the point that Rhoda Grant just made. Cabinet secretary, does the Scottish

Government support Salmon Scotland's suggestion to ring fence £10 million for rural housing in order to deal with depopulation?

Mairi Gougeon: I know that the suggestion has been made. Obviously, we have in place agreements with the Convention of Scottish Local Authorities on how that funding will be distributed to coastal communities, and this is the agreement that we have in place here.

Of course, I welcome and am happy to consider any suggestions, but it is important to remember that, if we were to do what has been suggested, we would have to do so, and look at the community benefit, in conjunction with our local authority partners. We have been able to show how we, together with industry, can deliver this in some of the communities that I have mentioned, and I am keen to make sure that that work progresses.

Ariane Burgess: I want to go back to and pick up on Rhoda Grant's first question. Perhaps I can illustrate my concern by telling you a little story—it will not be too long, convener.

I was contacted by a constituent—a scientific adviser—who objected to the salmon farm in the Loch Lomond and the Trossachs National Park. They felt that they had engaged all that they could, but their views had still not been taken into account. As a scientific adviser, they had also written on behalf of a marine sector association with regard to the original application, as well as personally—

The Convener: May I interrupt you?

Ariane Burgess: I need to get to this part, convener, please—

The Convener: No, no—I am sorry, Ariane. It is my understanding that the application that you are touching on has gone to public inquiry. Is that correct? If that is the case, it might not be—

Ariane Burgess: I am not asking about that application. I am just providing an illustration, and then I will get to the point.

The Convener: You did mention the application.

Ariane Burgess: Okay.

The Convener: You need to be careful, given that there is a public inquiry.

Ariane Burgess: I will make it less direct and more generic, then. Thank you for correcting me.

I have been contacted by a constituent who has scientific experience. Having done all that they can to express concerns, they have come to me with a sense of exasperation and have basically asked, "What can communities do to stop this industry completely wrecking the inshore waters on the west coast?" How will you reassure my constituent that communities will have a genuine say on new farms in their inshore waters and that such a right will be safeguarded and improved?

Mairi Gougeon: It is really important that communities are able to have their say. Indeed, we specifically recognised and mentioned that point when we talked about introducing and bringing forward a vision for sustainable aquaculture in Scotland. Of course, we are in the process of developing all of that, and I hope to be in a position soon to share it with the committee, but you will see the role specified in that.

It is the same in my community, your community or whatever community: when a proposal for development arises, it is right and fair that people have the ability to make their views known as the planning process proceeds. We recognise that within the planning process as it exists. Again, I come back to the work that has been taken forward through the consenting task group. The multilateral discussion that takes place at an earlier stage, and that we hope will involve communities, is a key element of the process. It is important that those discussions are held at the earliest possible stage in developments and that communities are engaged with as much as possible.

Ariane Burgess: I want to pick up on another part of Rhoda Grant's question, but this time my focus is not so much on housing as on jobs.

You are talking about trying to develop a sustainable vision on aquaculture. There is ample evidence of the risk that climate change and the resulting warming seas pose to salmon farming, especially on the west coast. Salmon stop eating when the water temperature hits 18°C, and they cannot survive beyond 21°C or 22°C. If the industry could become unviable on the west coast, should we be planning now for a just transition for workers, as well as regulating the sector so that the sea bed, in particular, has good environmental status when farms move from their current locations, or possibly even go out of business? Is the Scottish Government undertaking a risk assessment of the future of salmon farming on the west coast and the livelihoods that currently depend on it?

Mairi Gougeon: We are looking at the challenges that you are talking about. I mentioned the need for an adaptable framework that we can alter as we get more information, research and data and respond to the innovations. We need a framework that can adapt and manage, and that is why the themes of work are being taken forward through the farmed fish health framework include climate change and other such areas. We have to look to the future. That work and what we do on

climate change are already a key priority, and we continue to look at it. We are dealing with a really innovative industry and, obviously, I am keen to enable it as much as possible.

Ariane Burgess: Will there be a risk assessment of the possibility of people losing jobs? Rhoda Grant said that people are unable to get homes in places where they want to live. If a salmon farm can no longer operate because the salmon do not survive and it has to move away, those jobs are lost. Are we assessing that risk?

Mairi Gougeon: We have not undertaken a risk assessment at the moment, but, as I have said, a huge number of pieces of work are under way, as should be clear from what has been set out against the recommendations as well as from previous inquiries. In that work, we are addressing some of the challenges that the industry currently faces and challenges that it will face in the future.

Beatrice Wishart: We have talked a lot about the workers involved in the salmon industry, but, when you look at the supply chain, you will see that there are much wider implications for those who supply the feed and those involved in boat building. For example, in my constituency, there is a factory that makes boxes for the salmon industry. When you look at the totality of the supply industry in rural areas, you will see how important it is.

One issue is hauliers, which form a big part of the supply chain. Does the Government recognise the need for reliable transport connectivity to get the product to market as well as to support the areas in which the salmon industry operates?

Mairi Gougeon: Absolutely. Rhoda Grant touched on that issue, too. We have to ensure that we have in place the basic infrastructure, transport connectivity, housing in rural areas and so on. You are absolutely right. Aside from the fish farmers themselves, this is an industry that pretty much touches every part of Scotland, whether rural or not. I recognise the importance of your point.

The Convener: Consultations are on-going on highly protected marine areas. Can you give us an overview of the aquaculture industry's response to the suggestion that HPMAs might cover 10 per cent of Scottish waters?

Mairi Gougeon: You will be aware that that work is being led by my colleague Màiri McAllan, the Cabinet Secretary for Net Zero and Just Transition. I have not seen the consultation responses yet, so I cannot go into any detail about what they contain, but I know that the salmon sector and the fishing industry have expressed concern about the process. We have had the consultation, and we now need to analyse the responses.

Jim Fairlie: Can I have one more question, convener?

The Convener: Certainly.

Jim Fairlie: I am sorry, but I have just picked up on something that I probably should have asked about earlier. The Griggs review says:

> "There is an allowance in the licence charge for local community benefit for the area where the site is situated. It's my belief that a significant amount of what is collected (similar to Norway) goes back to the communities in whatever form so that they can also benefit from the economic prosperity that the farms will bring. Decisions will have to be made on whether this part of the payment should be collected by Government for redistribution or whether the operator should be legally obliged to disburse that payment themselves directly to the community".

Did you address that in answer to a previous question? Did I miss that?

Mairi Gougeon: Rhoda Grant asked me about the benefits that communities get, and I talked about the sea bed lease fees that Crown Estate Scotland receives and how those are distributed to local authorities for community benefit.

Jim Fairlie: Okay. So, where my head is on this is that, if communities that are affected by fish farms do not have a vested interest in them, they will not have the same buy-in. Is there a way of strengthening the local community's ability to have a vested interest?

Mairi Gougeon: On community involvement and engagement through that process, are you talking particularly about the—

Jim Fairlie: It is almost how certain wind farm operators work—the money goes directly to the community for the community to be able to work. Could the same be considered for fish farm sites?

Jill Barber: Individual fish farming companies already do quite a lot, such as sponsoring shinty teams. It is quite varied, but we can look at the issue once we publish the vision for sustainable aquaculture.

Over and above the Crown Estate lease fees that already exist, Professor Griggs recommended looking at social contracts. For example, some fish farming companies going through the development process will say, "Here is a £50,000 fund for the community." We need to understand the totality of that and best practice moving forward.

Jim Fairlie: As we go along, I want to learn more about the benefit that will come to the actual community who live there and who are most affected. Thank you.

The Convener: That concludes our evidence taking, and I thank the cabinet secretary and the

officials for attending what has been a good session.

As that concludes our meeting in public, we will now move into private session.

11:26

Meeting continued in private until 12:16.

Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

All documents are available on
the Scottish Parliament website at:

www.parliament.scot

Information on non-endorsed print suppliers
is available here:

www.parliament.scot/documents

For information on the Scottish Parliament contact
Public Information on:

Telephone: 0131 348 5000
Textphone: 0800 092 7100
Email: sp.info@parliament.scot

The Scottish Parliament
Pàrlamaid na h-Alba