# RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

Wednesday 17 December 2008

Session 3

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# RURAL AFFAIRS AND ENVIRONMENT COMMITTEE 24<sup>th</sup> Meeting 2008, Session 3

#### CONVENER

\*Roseanna Cunningham (Perth) (SNP)

#### **D**EPUTY CONVENER

John Scott (Ayr) (Con)

#### **COMMITTEE MEMBERS**

Karen Gillon (Clydesdale) (Lab) \*Liam McArthur (Orkney) (LD) \*Alasdair Morgan (South of Scotland) (SNP) \*Elaine Murray (Dumfries) (Lab) \*Peter Peacock (Highlands and Islands) (Lab) \*Bill Wilson (West of Scotland) (SNP)

#### COMMITTEE SUBSTITUTES

\*Rhoda Grant (Highlands and Islands) (Lab) Jamie Hepburn (Central Scotland) (SNP) Jim Hume (South of Scotland) (LD) \*Nanette Milne (North East Scotland) (Con)

\*attended

#### THE FOLLOWING GAVE EVIDENCE:

David Faichney (Scottish Environment Protection Agency) Stuart Greig (Scottish Government Environmental Quality Directorate) Michael Russell (Minister for Environment) Chris Spray (Scottish Environment Protection Agency) Judith Tracey (Scottish Government Environmental Quality Directorate)

**C**LERK TO THE COMMITTEE

Peter McGrath

SENIOR ASSISTANT CLERK Roz Wheeler

Loc ATION Committee Room 2

# **Scottish Parliament**

## Rural Affairs and Environment Committee

#### Wednesday 17 December 2008

[THE CONVENER opened the meeting at 10:01]

### Interests

The Convener (Roseanna Cunningham): I welcome everybody to the meeting and remind people to switch off their mobile phones and pagers or put them into flight mode, whatever is most appropriate to ensure that they do not interfere with the sound system.

I remind everybody that Karen Gillon is a longterm absentee from the committee because she is on maternity leave and that Rhoda Grant is her long-term substitute.

We have received apologies from John Scott and Nanette Milne is substituting for him. I will come to you in a second or two, Nanette.

Today, we will take further evidence on the Flood Risk Management (Scotland) Bill, first from the Scottish Environment Protection Agency, then from the Minister for Environment and his team. The two evidence sessions this morning will be the final oral evidence sessions on the bill. The next step will be to draft our stage 1 report.

However, agenda item 1 is a declaration of interests. I ask Nanette Milne to confirm formally that she is attending today's meeting in her capacity as a committee substitute.

Nanette Milne (North East Scotland) (Con): I am.

**The Convener:** And I invite you to declare any interests that are relevant to the committee's remit.

Nanette Milne: I have none.

## Decision on Taking Business in Private

10:02

**The Convener:** Agenda item 2 is consideration of whether to take in private agenda item 7, which is consideration of the committee's approach to scrutiny of the Climate Change (Scotland) Bill. Taking such an item in private is standard practice. Do members agree to take the item in private?

Members indicated agreement.

# Subordinate Legislation

### Zoonoses and Animal By-Products (Fees) (Scotland) Amendment Regulations 2008 (SSI 2008/378)

#### 10:03

The Convener: Agenda item 3 is consideration of a Scottish statutory instrument subject to the negative procedure: the Zoonoses and Animal By-Products (Fees) (Scotland) Amendment Regulations 2008 (SSI 2008/378). The Subordinate Legislation Committee raised points on this SSI; the relevant extract from its report has been circulated to committee members. No motion to annul has been lodged, but I understand that Rhoda Grant wants to comment on it.

**Rhoda Grant (Highlands and Islands) (Lab):** Under the heading "Consultation", the executive note reads:

"There has been no consultation on the amending Order"

#### because it is

"simply to set fees at ... a level ... to achieve full cost recovery."

However, there is still a cost to the industry from the instrument. I am a bit concerned because, even if there is no alternative, people should have been consulted, which would have allowed us to consider the instrument's impact on them. I spoke to the committee clerks about the issue, but I believe that they could not get a satisfactory answer. I am keen for us to write to the minister on the matter.

**The Convener:** We do not need to complete consideration of the instrument today, so we can consider it again at our meeting of 7 January. In the meantime, we can write to the minister to inquire why the Government went down the road that it did. Would you be happy with that?

#### Rhoda Grant: Yes.

**The Convener:** Okay. I defer further consideration of the instrument until 7 January.

# Flood Risk Management (Scotland) Bill: Stage 1

#### 10:04

The Convener: Under agenda item 4, we have two evidence-taking sessions on the Flood Risk Management (Scotland) Bill. I welcome to the committee David Faichney, flood warning unit manager, and Chris Spray, director of environmental science, both from the Scottish Environment Protection Agency.

We have received written evidence from SEPA, so we will not have opening statements but will go straight to questions from members. First up is Peter Peacock.

Peter Peacock (Highlands and Islands) (Lab): Good morning, gentlemen. In much of the evidence that we have heard in the past few weeks, concerns have been expressed about the absence of the word "sustainability", or of a definition of sustainability, from the bill. It has been argued that there should be an explicit reference to sustainability. Government officials argue that the whole bill is about sustainability, so the argument that the long title should explicitly mention sustainability is not upheld. What are your views? Do you agree that the bill is implicitly about sustainability, should or sustainability be mentioned explicitly in the bill?

Chris Spray (Scotti sh Environment Protection Agency): We regard both the bill and the directive-to which some parts play-as being ultimately about sustainable flood management. I do not think that we necessarily need the word in the bill. My colleagues tell me that it is a difficult word to define, but in any case the whole bill is about sustainable flood management. It talks to long-term planning and geographically large-scale planning, and it even talks to the benefits and costs. I am quite happy with it as it is, because the whole thing revolves around sustainable flood risk management.

**Peter Peacock:** Is it possible that, because the bill does not explicitly mention sustainability, your interpretation of your role and duties under the bill might be open to debate and argument in the future? If sustainability was mentioned—to the extent that it can be defined—might that put your role and duties beyond doubt?

**Chris Spray:** I do not think that it matters, because the legislation under which SEPA was created already requires us to take account of sustainable development in all that we do, so that is pretty well covered already. Outwith discussions on the bill, we have done quite a lot of more general work with the Government on how we define sustainable development.

**Bill Wilson (West of Scotland) (SNP):** Section 18(8) of the bill provides for definitions of low, medium and high probability of floods. Strictly speaking, it gives Scottish ministers the power to determine those definitions. How do you wish the low, medium and high probability of floods to be defined? To what return periods should those probabilities be linked to ensure consistency?

David Faichney (Scottish Environment Protection Agency): That is a difficult question to answer at present. The directive is clear that floods with a medium probability are likely to return once in 100 years. That can also be expressed as an annual accedence probability of 1 per cent. I think that one of the Government's proposed amendments suggests that we talk about things in terms of accedence probabilities to be clear about low, medium and high-probability flood events.

When we consider high return period flood events, we need to think about our urban drainage systems, most of which were designed to cope with one-in-30-year return periods. We need to consider the impact of more frequent flood events on urban areas.

The planning framework in Scottish planning policy 7 regards extreme flood events as those with return periods of one in 1,000 years or more. The areas that are affected are at very low risk of flooding, but when flooding occurs, it has a high impact.

For medium probability floods, the return period of one in 100 years has been set. We are looking at a period of about one in 30 years or less for high probability and a period of between one in 200 years and one in 1,000 years for low probability.

Elaine Murray (Dumfries) (Lab): The success of the bill depends on co-operation and coordination between the responsible authorities and partners. As the lead organisation, how will SEPA ensure that there is co-operation and co-ordination between organisations? For example, if local authorities and Scottish Water disagree about their responsibilities or who does what, what will be your role in sorting that out?

**Chris Spray:** Ultimately, we regard the Scottish Government and the minister as the final arbiter, but I think that all of us who are involved would feel that we had failed in our duties if the matter got that far. Indeed, we would have failed, because we all have responsibilities to co-operate with each other and to co-ordinate our actions. We would not wish the matter to get as far as the Government.

The challenge is huge, and the legislation makes it clear that we all have a role to play in working together on the issue. The first cycle of the iterative process will be the most challenging, because a certain amount of learning will be required. There is good evidence that the more work that we have done on the flooding bill advisory group, which brings together the various relevant organisations, the better we have become at working together and understanding where we are coming from and what we have got to deliver jointly. Clearly, we have a role to play in bringing people together, but it is a facilitating role rather than an overseeing role—we do not give directions to folk, as that would be the wrong role for us to take.

We will learn as we go along. We all need to work together towards a common vision.

**Elaine Murray:** It has been pointed out that there must also be co-operation on river basin planning under the Water Environment and Water Services (Scotland) Act 2003. How can you ensure that flood risk management co-ordinates with river basin planning?

**Chris Spray:** From a policy point of view, the Water Environment and Water Services (Scotland) Act 2003 views flood management as part of the deliverables. To a certain extent, we have been waiting for that to occur, and that is what we expect to happen.

There are already water framework directive area advisory groups in the eight sub-basin districts around Scotland, and there is a national one as well as a cross-border one that involves the Tweed and the Solway, which I chair. Those groups work well. They have improved over time, as people have got to grips with their roles.

We desperately want not to roll out yet more consultative and advisory committees than we absolutely have to, as there is a danger that consultation fatigue will hit all of us. Therefore, we want to build on the work that is already being done, although the local area groups for flood risk management will be led by local authorities, with us leading the national one. We hope to take what we can from the existing situation rather than duplicate structures.

**Elaine Murray:** The Scottish Rural Property and Business Association was a bit concerned about SEPA having the lead role as competent authority, as it felt that you were acting as both administrator and enforcer. We have also heard about the importance of putting in place safeguards to ensure the independence of SEPA. Do you have any concerns that people might see you as not being independent and, instead, being a Government body imposing the will of ministers on other recalcitrant authorities?

**Chris Spray:** Sometimes we are seen as a Government body and sometimes we are not. That is partly to do with who is looking at us and partly to do with what we are dealing with.

We have some clear regulatory functions around the control of abstractions, discharges, industry and so on. However, particularly with regard to hydrology, we have a remit, under the Civil Contingencies Act 2004, to warn and inform people. We also have an important remit to report on the state of the environment.

I think that the SRPBA took a mistaken view of the pulling together of some of those roles. We are not coming into this area wearing our regulator hat. Rather, we are wearing our co-operative, coordinating, facilitating and expertise-sharing hat. It is true that we issue licences under the Water Environment (Controlled Activities) (Scotland) Regulations 2005 but, alongside that, we do an awful lot around enabling regulation—I think that that is the buzzword at the moment.

**Peter Peacock:** It is commendable that you see your role as being more to do with bringing people together than directing people to do things. However, given the powers that you have under the bill, what would be your position if the efforts that you were making to encourage co-operation were not delivering what you believed had to happen, strategically? How could you make things happen?

#### 10:15

Chris Spray: I said before that, ultimately, we would have to go back to the Scottish Government. There will be some tensions, especially the first time around, between our role, which is to put in place the frameworks and highlevel district achievements and aims, and that of sub-district, local authority-led groups, which is to build management programmes within those frameworks. We are aware of that issue and need to work through it in a co-operative way, so that we do not appear to be putting in place frameworks that are entirely unreasonable environmentally, economically or otherwise and do not play to a local group's priorities. The system will be built up mostly from the bottom, but we will be involved at the top level. Ultimately, we would look to the one final arbiter-the minister. However, we all have a duty to collaborate, so if we got to that point we would have failed miserably in the co-operative effort to reach an agreement.

Alasdair Morgan (South of Scotland) (SNP): In paragraph 2.2 of your written evidence, you say that Scotland

"faces an acute shortage of trained hydrologists and flood risk management professionals."

I am filled with horror at the thought of yet another group of management professionals running our lives, but in evidence to the committee the Government, too, referred to a shortage of hydrologists, trained engineers and so on. Can you give us a feel for the size of the shortage? How many people are required, over what period of time? How does that figure compare with the current levels of recruitment to the professions?

Chris Spray: I may have to submit further written evidence to the committee with the exact details, as they are always changing. Of all the professions with which SEPA is involved, at the moment it has the most difficulty recruiting hydrologists and hydrogeologists. We regularly lose competent staff to consultancies, which walk in and offer people jobs-almost the same jobs, from the other side-at salaries that we cannot match. We know that local authorities are in exactly the same situation; consultants are also fighting hard. South of the border, the Environment Agency is in a poor state. In previous evidence, I noted that, according to the United Kingdom Parliament, 200 flood risk manager and engineer posts were vacant in England and Wales at one time

We are not that far off, but some of the recruitment campaigns that we have run for hydrologists have resulted in our recruiting one person for two or three vacant places or having only six people apply for a post, only two of whom were competent to fill it. I know from talking to my local authority, Stirling Council, that it has been in similar situations. Recruitment of professionals is a real challenge for us all.

What are we doing with the Scottish Government and others to tackle the problem? In Scotland we have centres of excellence at the University of Dundee and the University of Stirling. We have talked to the universities about how they might modify their existing MSc courses to take a wide range of professionals-engineers, people involved in geographic information systems or mapping and eco-hydrologists-rather than just one type of engineer or hydrologist. We have suggested that they build on existing one-year or two-year part-time courses to turn out people who can meet our and local authorities' needs. The initiative is at a fairly advanced stage and the universities can do what we want-all that is lacking is money. It is vital that we address the issue. Inducement money such as bursaries, rather than funding that covers the full costs of an individual's course, may be enough to attract students. Working with the two universities, we have developed a fairly advanced potential programme.

**Alasdair Morgan:** What is the current production—if "production" is the correct word—of suitable people? Do we need a 50 per cent increase or a doubling of numbers? Can you give us a sense of how big the challenge is?

**David Faichney:** The financial memorandum suggests that SEPA will require between 40 and 60 extra staff over the next few years. Those include a maximum of between a dozen and 15 flood risk management professionals—the people responsible for flood risk assessment. We will need to bring in about three or four people a year and to work out where they will come from. However, that is the number required by SEPA alone—others will be in competition with us.

We have been looking elsewhere as well as working with universities. We understand that the Met Office is running a model to examine other ways—rather than going through the university system—of bringing in experts to join it. That involves working with school leavers, and identifying people who are ready for a career change and who can be encouraged to join the organisation and be provided with internal training. In the longer term, we need to consider at which points people will join the organisation and how we develop and retain people who have the exact skills to deliver what we require.

Alasdair Morgan: But that will presumably be counterbalanced, as the consultants you mentioned will also be recruiting more people. Everybody will be getting their own flood risk management consultant.

**Chris Spray:** That is correct. The one existing MSc course that is key for this field, at Stirling, will turn out only a maximum of about a dozen people in any one year. Some of them will go overseas and, as you say, the rest will disappear into consultancies, local authorities, SEPA and elsewhere. The demand will be greater than the current production by a significant amount, certainly in the first five years. After that, it might begin to level off, but an injection of cash into the relevant universities in Scotland is urgently needed to attract folk on to those courses. We in SEPA—as well as local authorities—need to build mechanisms to ensure that those people then come to work for us.

Liam McArthur (Orkney) (LD): Alas dair Morgan mentioned a concern about an explosion of additional professional managers. To what extent are you able to diversify to meet the new demand for the skills that are required? If local authorities were simply to expand the workforce by adding hydrologists and did not make reductions elsewhere, they would quickly come under severe financial and public relations pressure.

**Chris Spray:** That is a good point. We discussed with the guys at Stirling and Dundee universities the extent to which the courses can be made modular, so that we can tell current professionals that if they take modules 2 and 3, it will give them the skills to start working on a particular project. As David Faichney said, some

of the skills relate to GIS and mapping, and the need for an understanding of hydrology is not that great as long as you have experts elsewhere to whom you can refer.

We have discussed the matter with the Convention of Scottish Local Authorities, which floated the concept of building up a central Scottish resource. We had not had such an idea, but COSLA said that if SEPA perhaps held a central resource, everyone could tap into it. I am not necessarily keen to go that way, but I can see where COSLA is coming from. I think that the universities can build on the modular approach to do exactly what you are saying—that is what we will do.

**The Convener:** Where do you recruit? For example, over a number of years the national health service has become accustomed to being raided by other countries that are recruiting; but, equally, it recruits in other countries. Has SEPA looked elsewhere to recruit suitably qualified staff?

**Chris Spray:** We increasingly do—you are right. We are slightly helped by the fact that the floods directive, and the water framework directive before it, is European legislation, so there are people in other countries who face exactly the same challenges and have the same skills.

**The Convener:** Because it is European legislation, however, those people will presumably be needed in their own countries to do precisely what we are doing here.

Chris Spray: That is true.

**The Convener:** I was thinking that SEPA might recruit from further abroad.

**Chris Spray:** We will certainly consider that we have had inquiries from Australia and elsewhere. We have a slight advantage over the rest of Europe, in that Scotland is leading the way: we are the first country that is introducing legislation to put the EU framework directive in place. If we act fast, we might get people ahead of other countries—although we may lose them later on.

**Peter Peacock:** I will move on to the question of duties on some of the responsible authorities that are listed in the bill, which perhaps relates to my previous question and follows what Elaine Murray said. In your submission, you state:

"without a duty to implement the actual plans"

-the flood risk management plans-

"this could ... potentially adversely impact on the national 'District' Flood Risk Management Plan submitted to Europe."

Will you expand on those concerns about the lack of an explicit duty to implement the plans in the bill? **Chris Spray:** We want a better linkage between the beginning of the bill, which deals with the correct and understandable general duty of responsible authorities and others to reduce flood risks, and the mechanisms for producing and implementing plans. That linkage needs to be tightened up; indeed, the supplementary evidence that the Scottish Government provided after the first evidence sessions began to address the matter.

Catchment management planning is mentioned throughout the European Union floods directive, but my understanding is that the directive includes no duty to implement. Relying only on a general duty to reduce the risk of flooding does not tie in closely enough with all the work on producing catchment flood risk management plans; a better link is needed. At this stage, I am not sure whether there should be an absolute duty to implement plans or another approach—I think that the supplementary evidence proposes that—but the link needs to be encouraged and strengthened.

**Peter Peacock:** You referred to the Scottish Government's supplementary evidence. I think that Government officials said that they want to strengthen slightly the duty to implement and that the minister gave his signature to that—I hope that I am not misrepresenting what was said. I suppose that the issue is how slight the strengthening should be. I want to be clear. Given your role, you are clear that in the great scheme of things an explicit connection to implementing plans, however that is expressed, is important in delivering what communities need.

**Chris Spray:** We think so. The issue is linking what the sub-district local flood risk management plans say with the district plans, which we must finally send to Europe. Such an approach would give us greater surety that we will move forward. Otherwise, I think that there would be a risk that, for all sorts of good reasons and priorities, very little would happen.

The Convener: I want to ask about the change in SEPA's culture that the bill will bring about. At the moment, SEPA prioritises the environment for obvious reasons, but the bill will impose on it duties to protect communities, households, property and so on. How will you balance your duties come the enactment of the bill? With the existing culture, primacy is given to the environment. The River Earn in my constituency provides an example: its flood risk is put secondary to the environment. When we asked a Government official about the matter, he said that it was impossible to say how SEPA would balance its duties. I would like to hear about that directly from you.

**Chris Spray:** That is an interesting observation. As we speak, SEPA's culture is changing

dramatically fast. As our corporate plan shows, we have put a new emphasis on customer focus, which involves addressing not exactly the issue that you raise, but the area that you rightly highlight.

As we mentioned earlier, part of our culture is determined by our being a regulator, but we have an increasing culture as an enabling regulator that looks to planners and considers how we can help development and communities. With the growing emphasis on community partnerships and areas at local authority level, we will have to move further into such working. Therefore, seeds have already been sown in SEPA. The mere fact that we realise and are discussing what should happen will help us, but I acknowledge the conflict that you are talking about.

**The Convener:** It will be quite difficult to change the culture of the entire organisation quickly.

**Chris Spray:** I understand the challenge but do not think that that is so. We have already effected a massive change in focusing on the customer; I can give further evidence of what is involved in that.

In essence, parts of SEPA must change pretty fast. The parts of it that are already working on the water framework directive with area advisory groups already have to deliver things in partnership with a range of other stakeholders. The culture of those in the area that is already most exposed to such working must shift, and I think that it has already started to do so. However, we will certainly take on board what you have said. It is a good point.

**Rhoda Grant:** There is a duty under the bill for the assessments to include social impacts. Given that we have had evidence that very few tools, if any, are available for assessing social impacts, how will SEPA fulfil that requirement under the bill?

**Chris Spray:** Rhoda Grant is quite right that the bill includes duties to assess social and economic impacts, which are not necessarily matters that we deal with regularly at the moment. We see the main task as being to use the evidence that is already available. Some excellent work has recently been done at the University of Dundee on the social impacts of flooding, so our aim would be to build further links with Professor Alan Werritty and the folk who have done that work.

#### 10:30

**David Faichney:** There is no doubt that we need to expand on those skills and to understand not just the social impacts but the economic impacts of flooding.

Some tools are already available that we are beginning to deploy to understand how effective flood warning systems can be in mitigating flood risk. Those tools take account of social and economic impacts, so that we can balance the spend on a flood warning system with the benefits that it will bring. Some of the processes and thinking behind the cost benefit work that we are starting to do on flood warning systems would be applicable to other mitigation measures, to ensure that the costs and the benefits balance. Analysis of the benefits must obviously take account of social benefits.

**Rhoda Grant:** Are you confident that you can fulfil that duty under the bill?

**David Faichney:** I am confident that the means are available to us to explore the issue externally with academics who have done work in that field. We can examine the systems that we are already using for flood warning development to identify how applicable they are, but there is a fair amount of work to be done on that.

Reducing the social impacts of flooding is about reducing the impact of flooding on communities and people as well as its impact on the environment and our cultural heritage. There is a hierarchy, and communities would come first.

Peter Peacock: I want to move on to natural flood management and the evidence that we have taken on SEPA's responsibilities under section 16, which requires the organisation to map natural features. There has been discussion about whether the requirement to carry out that process at national level is the right resolution to achieve local implementation of natural flood management methods. In addition, it has been argued that not just natural features but natural processes should be considered, and that that ought to be defined in the bill. Will you give your views on both those issues?

Chris Spray: We were quite keen for the bill to refer to natural processes. That is mainly because we are hydrologists, so we understand and are capable of measuring processes. Many of the questions about natural flood management are about how effective such techniques are. To define effectiveness, one must say on what the techniques have an effect. The answer is on the hydrograph-the height to which a river or body of water will go over time, which obviously equates to a flood. That is influenced by all sorts of processes, such as run-off. We have always been of the view that we would prefer reference to be made to processes, but we will not lose too much sleep about the bill's reference to features; we will work with that. If, ultimately, that means building a feature that has an influence on processes, we can work that way. The key element is that it is understood that we are talking about processes.

The question about whether the national level is the right level is interesting because, for us, the problems or challenges to do with natural flood management are really about scale and time, as the committee has picked up. At the moment, we do not know enough about how quickly or for how long different techniques would work. For example, when woodland is planted, it takes quite a while for the trees to start to have an impact. Maintenance of such features is another issue. There are many unknowns when it comes to determining how much one would have to do to have an effect down stream.

In essence, what the bill proposes seems to be a very good idea. We recognise the opportunity that it presents to define the issue and get some evidence on it at the top level. In my trees example, one would want to know, in theory, how many trees one would have to plant and over what area to get a particular reduction in a flood hydrograph. Such work can be done at an extremely high level-that is the role that we see ourselves picking up. We will examine what other measures are available and will look to studies in Europe and elsewhere to find out what is known about the effectiveness of such measures. We would definitely go global to get such information, although as we have said elsewhere, studies in Scotland are essential. That is the level at which we would operate.

I will leave David Faichney to talk about connectivity down to local level.

David Faichney: Section 16 is about our getting a national overview and an understanding of where there is potential for natural flood management measures; that is, where we are likely to be able to make land use changes or capture land that would enable our doing something to mitigate flood risk. That work will be done throughout the country, so it will be at a level greater than the catchment scale. Once the potential areas for natural flood management throughout Scotland and the areas of significant flood risk have been mapped, we can put the two layers together, which will allow us to decide whether opportunities exist for natural flood management where there is significant flood risk. That is the level of work that SEPA will do under section 16.

At the next layer, that work will have to be underpinned by really robust science and research. As Chris Spray said, it will be difficult to understand issues such as the scale and time that are required, whether the land is available, whether changes can be made, and whether they can be sustained for long enough to demonstrate conclusively that they are having a positive impact on the flood hydrograph. We will also need to understand how the measures will benefit the community—or whatever else we want to protect—downstream. An awful lot of research and science will be required to provide conclusive proof such that the cost benefit decisions that we talked about earlier can be made. That will involve weighing up natural flood management measures against other measures so that we are sure, before money is spent, that we will get the most benefit from it.

Through the flooding bill advisory group, the Government has already set up a natural flood management group, which is starting to initiate research. A contract is about to be let to an organisation or company—depending on who gets it—to start work on natural flood management issues. That will involve considering what we really need to understand and what is achievable at the catchment scale to make a difference to flood risk.

**Chris Spray:** There are already examples in Scotland of that process working. The convener will know that when the Perth flood defences were being considered, detailed discussions were held on the extent to which the upland catchment could have an impact and help with mitigation downstream. There are similar good examples in Glasgow, where people have considered those issues. That is the sort of thinking that needs to be done: we can certainly influence that.

**Peter Peacock:** That is a helpful description of SEPA's role and the level at which you will operate. I have a question that follows on from that. Once you have done the work that you describe and it has left your hands, so to speak, what imperative or force will act on those who are responsible for implementing schemes locally? Those people could say, "That's helpful and interesting, but we're going to do something entirely different."

David Faichney: If research has been done and we have tools to demonstrate where natural flood management could provide a benefit, we will look to everyone who is putting together the flood risk management plan in an area to show that they have taken notice of the potential for natural flood management and have done further scoping. By that, I do not mean the high-level work that SEPA might have done nationally, but work to identify whether potential exists and to consider that in detail. I suppose that the level of detail that the authorities go into will depend on the potential for natural flood management measures. In areas such as Glasgow, where it is important to keep water above ground and capture it at source, even small parcels of land could be useful in small catchments in reducing flood risk.

**Peter Peacock:** Indeed. You suggest that you would hope and expect those who are responsible to do that, but what would require them to think about the issues further?

Chris Spray: I guess that the starting point will be for us to work with them to find out whether a cost benefit case can be made for such measures. The challenge in considering the cost benefit ratio is that, understandably, communities fairly often want their area to be defended right now. As I one problem with many catchment said. management measures is that it takes time before they start working, so there are long and shortterm considerations. We must accept that sustainable flood management will involve considering the short term-which may mean more hard defences and better flood risk management and warning-alongside the long term, which may be more about a wholecatchment approach. Ultimately, if we say one thing, local authorities say another and we cannot reach agreement, we will have to go back to the ministerial position. That can happen at present in the planning process when development is considered, although the option is rarely used.

Peter Peacock: Would it be fair to say that you are presuming that natural flood management measures will be used? In a previous report, the committee talked about making it a requirement that there be a presumption in favour of considering—not necessarily implementing natural flood management measures. If such measures were to be ruled out, that decision would have to be justified. In the flow of work that you have described, would it help if the bill contained a presumption that local authorities and their partners would consider such matters?

**Chris Spray:** "Presumption" is probably the wrong word. The bodies must consider such matters, but must do so in the context of all the existing opportunities. To talk about a presumption in favour of or against something is probably the wrong way to go about things. As I have suggested, time and geography would have to be taken into account.

The Convener: We have many issues to cover, and I do not think that we will be able to cover them in the time that is available. I am not disposed to extend the hour that we have allowed for this panel—although that is not because of the witnesses. I want to jump to issues that we will have to deal with. If other issues cannot be fitted in, we may have to write to you.

**Chris Spray:** We would be happy for you to do that.

The Convener: Alasdair Morgan has a question about reservoirs, and Bill Wilson has a question about flood warnings. I would like them to ask those questions, so that we have responses for our report. After those questions have been answered, we will devote the remaining time to funding, which will also be important for our report. **Alasdair Morgan:** Paragraph 2.11 of SEPA's written submission is headed "National security considerations" and relates to reservoir inundation plans. Will you go into more detail on those plans?

**David Faichney:** From our security manager and emergency planning manager, we understand that sensitivities surround inundation plans showing what would happen if a reservoir were to fail. There are particular concerns about terrorist activity and the ability of organisations to understand quickly which reservoirs could have the biggest impacts downstream. I believe that such concerns are being thrashed out among the Department for Environment, Food and Rural Affairs, the Environment Agency and the security services in England and Wales.

**Chris Spray:** In my previous job at Northumbrian Water, one of my responsibilities was looking after Kielder Water. It was alarming to find that, at the height of some of the terrorist troubles, one of the cells operating out of Newcastle had details of Kielder Water.

Alasdair Morgan: You are suggesting that, if someone knew sensitive details of what would flood if a dam broke, that could make the dam a target—although, at the level at which these people operate, they might think, "It's pretty obvious what's going to be flooded if we blow up the dam."

Chris Spray: I would not disagree with that.

David Faichney: The bill requires SEPA to map the areas where we think there are significant flood risks in Scotland. That will include mapping of areas downstream of reservoirs. Consideration would have to be given to the level of detail, where the details were to be held, and whether they were to be publicly available. There would be a tie-in between general maps showing the extent of possible inundations and the sort of maps that are wanted by emergency planning agencies, which would indicate the possible impact of flooding-the number of deaths, perhaps, and the number of key properties downstream, such as schools, old-folks homes, fire stations or critical national infrastructure. The agencies do not want that kind of information to be made public.

However, discussions are continuing, and it seems to me that the issues will be resolved in the revisions that are being made to the Reservoirs Act 1975 in England and Wales. That is UK legislation, and there should be a benefit to us in hearing the result of the discussions between EA, DEFRA and the security services.

Alasdair Morgan: You are fairly hopeful that the requisite information will be available to those who need it.

David Faichney: Absolutely.

**Chris Spray:** And that it will not available to those who do not.

Alasdair Morgan: Those who need it will include a wide range of people, not all of whom will have signed the Official Secrets Act.

**David Faichney:** If information has to be held separately or securely, or in different forms, there will be an impact on resourcing. We are concerned about that.

**Chris Spray:** We are in separate discussions with the Scottish Government about assessing for all critical national infrastructure the risk of flooding—whether that is coastal flooding, storm surges or whatever. Those discussions are separate but tie in to this one.

**Bill Wilson:** Various discussions have taken place on to whom SEPA should provide flood warnings, and Government officials have told us that they have not specified that. The Association of Chief Police Officers in Scotland has suggested that SEPA should notify all category 1 responders. To whom do you provide flood warnings at present, and do you expect any changes to that in the light of the bill?

#### 10:45

David Faichney: SEPA's primary customers for flood warnings are local authorities, the police, fire and rescue services in some instances, the telephone floodline service and the web service, through SEPA's website. We make flood warnings available to the public through the floodline service and through professional partners such as the police and local authorities. Some local authorities cascade those flood warnings down to individual customers in their areas, such as businesses and householders. The local authorities and the police are category 1 responders. In large flood events, SEPA, as a category 1 responder itself, has to share information about the event that it is leading on-in this case floods-with all other category 1 responders through the strategic co-ordinating group structure.

**Chris Spray:** It is worth reassuring the committee that we are working on a new flood warning dissemination system for Scotland. It is a £7 million project. The advisory board for that includes ACPOS, the Society of Local Authority Chief Executives and Senior Managers, COSLA, and fire and rescue services. We are also going to bring the national health service on to the board. The new system will enable folk to get individual messages. It is key that everybody understands the messages and how they are produced. It is not a SEPA system; it is for all of those groups.

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**Bill Wilson:** Does that mean that in every circumstance—apart from minor floods perhaps—those people would always be informed?

**Chris Spray:** As a category 1 responder, that is what we have to do. It is one of our key roles under the Civil Contingencies Act 2004.

**Bill Wilson:** Do you have a feedback mechanism to check that when you send those flood warnings out they are acted upon?

David Faichney: We get feedback from our key customers. We work closely with local authorities and the police during and after flood events, and we do debriefings with them for significant flood events. A few years ago, we operated cascade systems that went to the police and then on to the public, and we would carry out an annual survey to ensure that people were receiving those warnings. When that was in place, we were getting feedback that about 80 per cent of people had received and understood the warnings. However, that was a distinct group of about 200 people. It is different from what we understand is the EA's experience, which is to work with much larger numbers. It is challenging to engage with people and to help them to understand what flood warnings are about and what they should do when they receive a warning.

SEPA's flood warning dissemination project for our existing flood warning schemes will ensure that community engagement is at the forefront of the process. It is about ensuring that people know that they are at risk and that they are in a warning system, and that they know what to do when they receive a warning.

**Chris Spray:** We are working closely with the Met Office, which has for the past six months been trialling some new work on severe weather warnings. That enables the Met Office and us to give much more information about random events, such as intense rainfalls that do not necessarily build up over a long time. We aim to continue working closely with the Met Office—indeed, that is one of the committee's recommendations—to develop that further into a sort of joint forecasting procedure.

**The Convener:** I want to move to funding, which is the key to much of the bill.

**Peter Peacock:** You indicated in your evidence that the task of aligning funding streams might prove difficult and that it may, ultimately, require guidance from the Scottish Government. You also indicated that the timing of existing funding mechanisms for local authorities, Scottish Water and SEPA are not in sync, and that funding is not in sync with your programme planning periods. There may also be uncertainty about the long-term maintenance of flood risk management. Those are clear descriptions of the problem. What do you think the solutions would be?

**Chris Spray:** I like the easy questions. The processes of various funding streams do not coincide, but that is just a fact of life—they were all set up for different reasons. Quality and standards III and Q and S IV do not have the same timescale as us. Some of us work to comprehensive spending review periods; others do not and we all need to recognise that. To have some centrally held funds that we could draw down—which I think was one of Scottish Water's ideas—seems to be an eminently suitable way of going forward.

I think that, in the first year, we will have to muddle through. As I said, it is an iterative process and we are at the start-up point. As we go forward, we need to embed the funding so that aligning it is high up on the agenda in the next Q and S period and so that local authorities can plan for it as well. The role that SEPA plays is less of an issue for us, but others need to acknowledge that funding alignment is a challenge. We and others should not miss that challenge.

**Peter Peacock:** Do you regard funding alignment as an interim issue until such time as there is much greater clarity about the planning processes and schemes that are coming on stream five or 10 years down the road? Is the idea of the centrally held fund simply to smooth the apparent differences in funding streams and when they might switch on and off currently? Does it have no other purpose?

**Chris Spray:** You are right that it will be an interim issue, because we are being parachuted into a new set of timescales to which no one was previously working. We must realise that. The current planning period runs to 2015, so by the time we are looking to the next six-year period, a lot of folk will be able to think about the matter.

Scottish Water's option for raising funds is to raise them from customers. Its money-raising powers are controlled fairly well by the Water Industry Commission for Scotland and by the Office of Water Services. That is why I think that a centrally held fund from which we could draw down funding would allow us to get smoothly through the first period and into a much betterplanned future.

**Peter Peacock:** I follow that. What time horizon ought we to have for planning what will sometimes be major items of expenditure in Scottish and, certainly, local authority terms? We have had evidence from the Association of British Insurers, Scottish Water and others that it should be 25 years and, in a committee report, we talked about long horizons, but in the answer that you have just given, you mentioned a 12-year horizon. What is your feel for the longer-term planning lead?

In evidence, Government officials said that because of your overview of the system, SEPA would have a role in advising ministers about the longer-term or medium-term financial requirements that might arise, but there is in the bill no requirement on you to do that. Will you comment on that?

Chris Spray: There is a six-year planning cycle. As I said, we are in one at the moment, so let us think about how we will do the next one. We should look 20 or 25 years ahead. The Scottish Government has given us a steer to consider the strategic needs for flooding in that time period so that we can start building in what we know about climate change, and so that we can set prioritieswhether it is coastal flooding, which areas it affects and what we need to look for. That will also start longer-term natural flood US looking to management.

That is why we have two different timescales. It is important to get a vision or road map for 25 years because it will allow people to understand the key issues and it will enable us to bring together climate information from SEPA and the Met Office and to consider how the Government's key economic priorities fit in. We will put all of that together.

Can you remind me of what your second question was?

**Peter Peacock:** That is a good question—you should give me notice of such requests. My second point was that the Scottish Government has indicated that it expects you to advise ministers as part of the normal exchange of information with them, but you are not under any obligation to do so because there is no duty on SEPA to provide a strategic view of funding such as you describe.

**Chris Spray:** I must admit that I had not realised that we did not have such a duty. I am not being arrogant; we expect to work closely with the Scottish Government. Our role is not in telling it where finances go but in creating the road map for the future.

**Peter Peacock:** The role is about the quanta of cash and big schemes that are required. It is strategic.

**Chris Spray:** That is right—the role is very strategic. The costs of a single flood scheme are huge. I was recently considering a flood scheme for Hawick with Scottish Borders Council. We are talking about £50 million at a snip. There are a lot of places the size of Hawick scattered around Scotland with greater or lesser demands and needs right now. The amounts of money are large, but we need to project a long way into the future.

David Faichney: The flood risk management

planning process, as fed from the local plans up through the district plans, should set out where all the priorities are across Scotland. It should give us an idea of the hierarchy of those priorities—what is top of the list and where the big spends are. You will not be able to achieve all the priorities over one or two cycles; it will be many cycles before they are all achieved. There is a need to understand the relative benefits of projects nationally, and it will be very difficult to convey that at local level and to explain how the money that will be used to fund them is going to come from the bottom up. That will be a bit of a challenge.

Mr Peacock mentioned the maintenance of structures. Some of the Scottish Government's proposed amendments, including those on surface water management, will help if we understand where our assets are and who owns them. It will also help to have clarity about the ownership and roles of the various different structures. The Government's proposed amendments are an important first step.

**Peter Peacock:** Mr Spray mentioned Hawick, and there are many other such schemes, which you have to an extent to aggregate with your knowledge of what is needed and what is coming up.

There has also been mention of a hierarchy. Will that become evident in the course of your work, so that it can then be debated and discussed? Overall figures will emerge, and SEPA will be able to say what it thinks ought to be the next major sets of schemes, strategically and nationally. That will allow ministers to make their decisions.

**Chris Spray:** That would be very good. The current system is not like that. It is reactive to the demands that are—understandably—made in various areas about what the next key priorities should be. We need to get above that.

We must also consider the increasing conflict between the legacy of decisions that were made a century or two centuries ago, which have determined where some of our communities now are, and changing flow patterns and climate patterns, which might determine that some communities are simply unsustainable 50 years hence—and I say that in the sense of buildings existing as bodies of bricks and mortar. That debate is better started now, informed by the correct data, so that we can make the right decisions 50 years down the line. Let us start thinking that way now.

**Peter Peacock:** You are not looking for powers to remove settlements, are you?

**Chris Spray:** I am not asking for that. However, let us consider the options for the south-east of England. The Essex coast is retreating at a rate of 12m a year. Luckily, that is not the case up here.

We must recognise that there are some serious questions, but if we think about them now, we can plan into the future.

Liam McArthur: I take you back to the discussion about the proposal for a central pot of money. If I understand correctly, part of the purpose of that would be to smooth the transition and to provide some certainty. There has been quite a debate with many local authorities about whether or not re-ring fencing or having a central pot would be beneficial. From your point of view, and considering the job that you need to do, would certainty be provided if local authorities had such a ring-fenced pot from which they would be expected to draw resources for flooding?

**Chris Spray:** The real challenge for local authorities is around what to do in the current comprehensive spending review round. That is why we have spoken more about smoothing the differences in funding streams, rather than all the funding going into a central pot. I am not sure whether or not a central pot is needed in the long term. If we can plan, we might not need that. However, the allocation needs to stack up against the correct bit of demand. At the moment, we are in a very difficult transitional period, which is why we need the smoothing money. The debate on central funding might re-emerge in the future but, at the moment, we can probably plan ahead and plan that debate out, so to speak.

**The Convener:** There are some outstanding issues relating to the planning process, and we will follow up on them as soon as possible after the meeting, so that we can get responses from you. I am not disposed to extend this evidence session any longer.

I thank you both for coming along to the committee—not for the first time, and not for the last time either. You are of course welcome either to sit and listen to the minister's evidence or to leave at this point—as you prefer.

#### 11:00

I welcome to the meeting Mike Russell, who is the Minister for Environment, and his officials. Judith Tracey is the flooding policy team leader and Dr Stuart Greig is a senior flooding policy officer.

We understand that some difficulties exist this morning and that you will forgo an opening statement, so we will go straight to questions. The timescales—including that for taking evidence are quite challenging, so if anything is outstanding at the end of the hour and 10 minutes that we have allocated to evidence, we will follow it up with a written request for a response, which we hope would be dealt with as expeditiously as possible. **Elaine Murray:** I commiserate with the minister on his ill health. Something seems to be going round the Parliament—I blame the First Minister for introducing the illness to the rest of us.

The Minister for Environment (Michael Russell): I am sure that I can rely on Dr Murray not to take unfair advantage of me.

Elaine Murray: I will not. The mind boggles.

We have received evidence from Scottish Water, the ABI and—[*Interruption*.] Excuse me for coughing.

Michael Russell: You are not sounding too good yourself.

Elaine Murray: I had the illness two weeks ago.

Michael Russell: Shall we just call it a day?

**Elaine Murray:** We received evidence from Scottish Water and the ABI that we require a longterm strategy for flood risk management over perhaps 25 or 50 years. When the minister's officials were asked about that on 19 November, they said that the six-yearly planning process could cope with that. The ABI would like the bill to require a long-term strategy. Does such a proposal have merit?

**Michael Russell:** Nothing in the bill prevents the creation of a long-term strategy. In fact, much in the bill encourages such a strategy. I know that you have talked to SEPA, among others, about that.

To an extent, the process has not only started but is well under way. Scoping what will happen with flooding in Scotland as a result of climate change is a long-term process. We do not know all the answers, but we are beginning to see some of the questions and issues. When SEPA starts putting together its first plan, it will not do that with a six-year horizon that limits it; it will look much further forward. SEPA will consider what needs to be done in the first period, but it will also have an idea of where things are going.

The bill encourages long-term thinking; it does not limit that. It joins things up. It replaces the Flood Prevention (Scotland) Act 1961, which is very prescriptive about what can and cannot be done, and opens up a range of much wider possibilities. That is exactly what we need at a time of change.

It is almost impossible for me, you or anybody in the room to say that we know what will happen with flooding in five, 10, 15 or 20 years. We need to put together all the tools, the planning abilities and our thinking and to work forward from that. The bill achieves that. I am not worried about the timescale. We have the right tools for the job, which will work well. **Elaine Murray:** You do not think that wording is needed to encourage partners to look a bit further over the horizon.

**Michael Russell:** No. The debate has clarified and will continue to clarify many issues. Such wording is not needed, because the whole process focuses on moving Scotland forward on sustainable flood management.

**Bill Wilson:** Unsurprisingly, I will return to sustainable flood management. What are your views on the concern that the bill does not mention sustainable flood management? Does the bill contain a sufficient presumption in favour of natural flood management?

Michael Russell: Absolutely. Two points are involved. As the committee has taken evidence, it has debated the question whether the long title should refer to sustainable flood management. The committee will understand that I must defer to lawyers on such matters, and they say firmly that a bill's title is a description and not an aspiration. The title of the bill is therefore a description, but I fully accept that the aspiration is to have a system of sustainable flood management. Everything in the bill points towards that and towards ensuring that flood management is sustainable and that we are adopting a progressive policy. That is inherent and clear in the bill, and I want it to continue to be clear. I am afraid that we cannot change the long title; our legal advice is very firm on that.

**Bill Wilson:** Presumably, the aspiration could be mentioned elsewhere in the bill.

**Michael Russell:** Section 1 includes the promotion of sustainable flood management.

**Bill Wilson:** There is a concern that people have been working in a particular way for some time now, so we need actively to encourage engineers and planners into a new way of working. When Scottish Water estimated the cost of development, it did not seem to include either environmental or social costs. Is it possible for the bill to include a method of ensuring that, when new developments are considered in the future, the costs of environmental and social benefits or disbenefits must be estimated?

**Michael Russell:** SEPA's evidence this morning is that it is increasingly focused on the economic and social costs of flooding. Rhoda Grant asked a specific—and very good—question about that. That is where the focus lies, and SEPA is leading the way. However, I do not get the impression that any of the people who are involved in flood management require to be motivated to think about such matters. They are very much up to speed with and focused on them.

We have to be absolutely clear that the bill is trying to join up various resources, abilities and

organisations to focus on the task in hand, and we are trying to ensure that we do that entirely within the context of a positive environmentalism that should permeate all our policies in Scotland. The bill achieves that, although if you think that amendments could be made to the bill that would strengthen that focus, I am open to considering them.

Peter Peacock: You have referred to an issue, that, as I recall, formed part of the debate that we had in Parliament some months back. There is a presumption in favour of natural flood management methods, and I suspect that there has been a bit of confusion about what that means. To be clear, it is not that natural flood management must be used in all circumstances in which it is possible to use it. It is more about creating the imperative that it must be considered and, if it is not used, that must be justified. You indicated that there is a double benefit, not just for flood management but for habitat creation, for Would you consider lodging an example. amendment to the bill to make it clear that natural flood management must be considered? I am relaxed about the wording.

**Michael Russell:** The bill is already pretty clear about that. I can be positive about this, although there is a slight caveat. The positive nature of our approach to the bill is to make sure that the toolbox contains a range of tools. The 1961 act was too prescriptive; it was an act for another time. We now want to offer people a range of tools to mix and match as they wish, but the key tool among them all is natural flood management. We entirely accept that; that is how it should be.

However, you are right to say that natural flood management is not the solution to every flooding problem, and that must be borne in mind. I have a slight resistance to your idea because, if we have an extremely heavy rainfall event in an urban setting, natural flood management will almost certainly not be the answer. Other engineering solutions are in place, or need to be put in place, to deal with such events.

Natural flood management should, however, be in the toolbox. If I might put it this way, it should be the first tool that is considered. If there is a measure that will encourage that view to continue to strengthen, we will look at it.

Peter Peacock: That is helpful.

**Bill Wilson:** Our concern is that natural flood management is not the current culture. That is part of the reason why I asked about the cost benefit issue. If we can, we should ensure that the costs of the environmental and social benefits and disbenefits are included in the calculations.

**Michael Russell:** I disagree with you: natural flood management is increasingly the culture, and

I suspect that, by the time that the bill is fully implemented in 2010, it will be if not the only show in town—I do not think that natural flood management is the only show in town—then at the centre of things. You have heard that opinion from SEPA and a range of other organisations, and there will be a duty to choose natural flood management. It is important, and everyone involved in flooding now understands that.

Perhaps Judith Tracey could say a word or two to reassure you even further, should that be possible.

Judith Tracev (Scottish Government Environmental Quality Directorate): There is a requirement on SEPA, when it sets objectives and specific account measures, to take of environmental benefits among all the benefits that result from a particular measure. It has to take into account the potential adverse consequences of flooding on human health, the environment, cultural heritage and economic activity. Therefore, the environment is clearly part of everything that a flood risk management scheme will address.

**Bill Wilson:** My concern comes from having heard that, when Scottish Water calculated cost, it had no system for including the cost of environmental damage or social disbenefit. I want to be reassured that, when future possible flood prevention developments are compared, the potential costs, such as environmental and social disbenefits, will be included as part of the cost estimate. That will give a fair comparison between natural and alternative methods of engineering.

**Michael Russell:** It is important that, as Scottish Water's actions under both the developed plan for 2010 to 2014 and the new plan for 2014 onwards go ahead, that point is drawn to its attention. It is probably best to include that in the ministerial instruction to Scottish Water, and I can perhaps assure you by saying that I need to discuss that point with my ministerial colleagues who deal with Scottish Water. We can take a belt-and-braces approach to that.

The Convener: By now, you will have picked up the fact that the committee has some concerns about whether there can be a sufficiently robust culture change in the various organisations to encompass what the bill wants to achieve. I put a question to SEPA this morning about its ability to decide between what are perceived to be competing priorities—the priority mandating its concern about the environment and water quality and the new priority that relates to safety from flooding of communities, households and property. At the moment, it tends to prioritise one over the other. Are you confident that there is enough in the bill to ensure that SEPA shifts that culture by 2010? **Michael Russell:** I find that SEPA is ever more aware that it has to balance all its actions by considering their social and economic cost and its own environmental and regulatory duties. We have seen a development in SEPA's culture. It recognises that balance, and its work and innovations in planning show that. The bill will reinforce the fact that SEPA as an organisation will always have to make intelligent choices about its work, and I do not see anything in the bill that contradicts SEPA's primary environmental and regulatory duties. The two priorities will go hand in hand.

I know that there is constant talk about culture change, which is important. However, a dispassionate observer would agree that there has already been a culture change in SEPA. That process will continue.

**The Convener:** So you would be interested to hear of specific examples of where SEPA's priorities may be questionable.

**Michael Russell:** I am always interested in those examples.

**The Convener:** That is an invitation to committee members to let the minister know about any problems in their own areas.

**Michael Russell:** The chair of SEPA will be interested in those, too, as he is focused on the issue.

**The Convener:** Okay. Rhoda Grant has questions about planning and flood risk management processes.

**Rhoda Grant:** My question is on the interaction between flood risk management plans and local development plans. We have heard in evidence that local authorities will have regard to flood risk management plans in their development plans but that they will still consider economic developments despite what is in a flood risk management plan. Where do the different plans fit together? Should the bill emphasise that local authorities need to make flood risk management plans part of their development plans?

#### 11:15

**Michael Russell:** Section 24 in part 3 makes specific reference to development plans. However, I would place the issue in a slightly wider context. Clearly, development planning must take account of flood risk. If it does not, something will go badly wrong at certain stages. There is therefore an inextricable link between development planning and flood risk planning. The existing planning system recognises that because it applies special provisions to building on a flood plain. Development planning and flood risk planning must therefore go hand in hand. The development of local flood plans must take account of development activities, and vice versa.

**Rhoda Grant:** We are considering a petition as part of our evidence taking on the bill. The petitioners state clearly that the current planning policy guidelines are not being adhered to by some local authorities, which continue to plan for developments on flood plains. [*Interruption.*] Sorry, that cough is catching.

Michael Russell: I would just like to say that it is not my fault.

Rhoda Grant: I hold you responsible.

Michael Russell: It seems to be spreading like wildfire.

Rhoda Grant: Yes.

Although the existing legislation does not seem to work, there appears to be nothing in the bill to strengthen the link between flood risk management plans and development plans by forcing local authorities to ensure that the flood risk plans take precedence over development plans.

Michael Russell: There is a clear set of provisions on building on flood plains, but we must recognise that such building is sometimes necessary. For example, brownfield and other development land beside the River Clyde is on a flood plain. Clear regulations apply in such circumstances, and there is a clear procedure to be followed. We expect it to be followed and we believe that it is being followed. People tend to say that no building or developments should take place on flood plains. Regrettably, that is not possible. We therefore want to ensure that such developments are done within the planning system and that we have much more regard to ensuring that buildings on flood plains are resilient in relation to flooding. A lot of good work has been done on that. I am keen to encourage that approach, particularly with insurers.

**Rhoda Grant:** We had evidence from SEPA about the huge cost of even small flood alleviation schemes. Economic development has been used as an excuse to build on flood plains. However, what is the balance? How does a flood alleviation scheme costing the public purse £50 million—that figure was quoted for one scheme—fit in with economic development?

**Michael Russell:** That is an interesting and important question that local authorities and SEPA should sometimes ask. The balance has shifted greatly over the years in other countries. For example, Japan spent substantial sums on flood defences, even during the second world war, but it now spends far less on them because it does not believe the task can be adequately undertaken. We must constantly balance what is taking place, keeping the tool of natural flood management very much in mind as well, to hark back to an earlier question. One of the strong lessons from the bill is that the era of saying, "We will build a wall," is well and truly over. It has been substantially over for some time and, frankly, the bill is putting it to death.

**The Convener:** Elaine Murray has follow-on questions on flood risk management plans.

**Elaine Murray:** We have spoken about the need to join up resources and so on. Currently, Scottish Water goes through the Q and S process and consults every four years. It then draws up its scheme of priorities for investment for the next four years. Do you intend to take any action to try to align flood risk management plans with Scottish Water's business plans? There are also issues around funding streams, which we may come on to.

**Michael Russell:** I heard Chris Spray's earlier evidence on the issue. It is right that we take certain actions over a period of time. However, we have identified the problem involved. Perhaps Dr Greig would like to say a word or two about that.

Stuart Greig (Scottish Government Environmental Quality Directorate): We have set up advisory groups on the bill and its implementation. Scottish Water is well represented on those groups, one of which has started to look closely at the issue of aligning funding streams. We understand the problems around aligning the CSR and quality and standards, given the different timelines involved.

Under the process set out in the bill, however, an assessment of the areas in Scotland most vulnerable to flooding will be carried out early on, and that information will be available in time to inform the Q and S IV process. Although we might not have all the information on specific measures and objectives, we will have an understanding of where certain problems might arise. That will allow us to undertake some advance planning. Indeed, that principle of basing advance planning on available information will be at the heart of each of the iterative cycles that we need to take forward.

**Elaine Murray:** The funding of the local plans— [*Interruption.*] I think that my cough is more to do with last night's partying than the cold.

**The Convener:** I advise the minister that the Labour Party's Christmas party was last night.

**Michael Russell:** That is not responsible for the way that I am feeling.

**Elaine Murray:** Given that one of Scottish Water's principal funding sources is customer charges, if Scottish Water is required to provide funding the general customer will have to come up with some of that money. Obviously, the other

source of funding would be local authorities. Is it expected that flood risk management projects involving Scottish Water will be funded through customer charges, or will funding be directed through local authorities?

**Stuart Greig:** We are discussing that issue with Scottish Water, but it is most likely that we will continue to fund investment through current routes rather than look to local authorities to provide money to Scottish Water. That said, if local authorities want to develop, say, urban drainage management measures, they can use their own money for that and easily share the funding with Scottish Water. We will take a flexible approach that accommodates different sources of funding but, as I say, we will probably want to retain the current funding routes. A lot of work is being carried out on that and there are things that we can do to make the process work better, but I do not think that we need to change it significantly.

**Michael Russell:** A hallmark of the bill is its emphasis on collaborative effort. All the organisations that have been referred to, as well as many others, will be involved in the process. Obviously, those organisations will have their own funding priorities, but we are looking for collaboration. After all, the essential point behind the bill is that the work cannot be carried out by one organisation alone.

**Elaine Murray:** Scottish Water has a national pot, but what about local authority contributions? When an authority's local plan is established, it will want to bid for Government funding. What might be the process for identifying that funding?

**Michael Russell:** The committee is well aware of how funding has been allocated in the present spending round, so I will not labour the point. Essentially, for schemes that were already known about, resources were applied under an agreement with COSLA on folding money for flooding into the local authority settlement. Allowances were also made for schemes in development, and a proportion of funding was distributed to deal with properties at risk.

The allocation of further funding in other spending reviews will be a matter of negotiation with COSLA. The process has been—and, I hope, will continue to be—perfectly responsible, productive and positive, and it will be up to local authorities to say how all that should happen. We have made it absolutely clear that, as the concordat allows, there can in exceptional circumstances be discussions about other resources that might be required. No one has had such a discussion with us, and we are waiting to see what happens.

As I think Dr Murray will be aware, part of the issue is long-term planning. An awful lot of

schemes have been discussed at great lengthindeed, she and I can think of one particular scheme immediately-but no plans have been drawn up, no cost estimates have been made, no drawings have been done and no hydrologists have been engaged. People in a number of places in Scotland have asked me, "What about the resources for such and such a scheme?" when, in fact, no such scheme exists. Perhaps, as they draw up plans and think about the various possibilities, local authorities will be able to identify areas that might require small, medium or largescale schemes and roll all that into the process. The bill team officials have worked very closely with local authorities-which, after all, know where the needs arise-on the issue, and the mapping that will be carried out will create a long-term pathway for ensuring that everything that needs to be done in Scotland continues to be done.

**The Convener:** Peter Peacock's questions on the duty to implement flood risk management plans follow on from those remarks.

Peter Peacock: The ultimate aim of the technicalities around the bill is to provide better protection for homes, public buildings, public services and so on in flooding incidents. In the evidence that we have received, a lot of people, from agencies, non-governmental organisations, local authorities and so on, have expressed surprise that, although they are obliged to work with others to come up with flood risk management plans, there is no explicit duty to implement those plans. Your officials have indicated that you are beginning to think about promoting a link between the general duty to make plans and the specific duty to implement them. Can you tell us more about your intentions in that regard? Will the duty to implement the plans be explicit, or will the existing situation merely be tweaked?

**Michael Russell:** The context in which I will address those questions is one in which, for the first time ever, we have legislation that creates a general duty for local authorities and others to take responsibility for flood management, just as they take responsibility for education, road maintenance and so on. That is a big step forward.

The context is also one in which the Government's relationship with local authorities is positive and—I hope—trusting, with the Government encouraging local authorities to do the things that they have a democratic duty to do.

I have heard the evidence to which you referfor example, I heard SEPA talking about the matter this morning—and I am prepared to try to find ways of tightening up the bill in that regard. However, I do not think that we should be saying to people that they must implement their plans in a certain way. Local authorities have a duty to draw up their plans and then to work out how they want to ensure that they are put in place.

There is a democratic check and balance. If the administration in a local authority refused to implement a plan of action that it had identified as being necessary to protect lives and property, it would not last very long. First, there would be an electoral price to pay, and, secondly, the bill provides for the minister to intervene in such a circumstance and say that the local authority must take the actions that it has a duty to take, under its general duties.

The bill tells local authorities what they need to do and lets them get on with it. That strikes me as being the ideal way in which to work with people. However, in light of the concerns that have been expressed, we will continue to try to find ways in which it can be tightened slightly in that regard.

**Peter Peacock:** I welcome that indication, but I will reserve my position on the matter until I see the details.

You and I have political differences about the nature of the concordat, but we should put them to one side because, in a sense, that is not relevant to this argument, as the concordat is an instrument of current Government policy and, as you might—or might not—accept, the Administration will change at some point.

Michael Russell: At some point, I am sure, but not yet.

**Peter Peacock:** Nevertheless, a subsequent Government might have a different policy. Therefore, in the interests of good governance over the long term, it is important to move beyond a view that considers only current policy and to ensure that the bill delivers a way of ensuring that certain things will happen. Do you accept that point?

**Michael Russell:** I do not accept it as an absolute, because all legislation expresses Governments' views and reflects the way in which those Governments see the world politically. However, I accept that we have to create a piece of legislation that is fit for purpose in the longer term.

Alasdair Morgan: You suggested an analogy with local authorities' duty to maintain roads. If I damage my car in a pothole I can sue the local authority, but I will not be able to sue the local authority if it has not implemented a flood risk management plan. Indeed, Fife Council told us that your officials have assured it that it would not be open to legal challenge. Do you accept that difference between the two situations?

**Michael Russell:** I would not necessarily accept it; I will have to think a little more about it. You seem to have stretched the analogy a little farther than it ought to have been stretched. The general duty to protect against flooding is a considerable step forward in legislation. In those circumstances, it provides a considerable protection for citizens in each local authority.

Going to the extent of saying, "Once we have the plan, we have to implement it" is a step that we do not need to take. Furthermore, in terms of my view of our relationship with local authorities, we should not take it, although I accept that if there is concern about how the plans are to be implemented we should continue to look at the matter. I have given that assurance to Mr Peacock.

#### 11:30

Alasdair Morgan: Okay. I take the point. My view is that you cannot give people a guarantee against flooding in the same way as you can with roads—there is a difference in the level of guarantee that can be given.

**Michael Russell:** There are difficulties in giving any guarantee on flooding. We know quite a lot about roads: we know where they go and how they should be constructed. In flooding, there are still some uncertainties. As a committee, you have discussed those issues as part of your inquiry and, again, in your consideration of the bill. Not least of the uncertainties in terms of pluvial flooding is where the rain falls.

The Convener: One question that follows on from that concerns the process of co-operation and co-ordination. The local authorities, SEPA and Scottish Water have flagged up to us their concerns, particularly about the potential misalignment of roles. Who, ultimately, will crack the whip and say what gets done and when? There is still some uncertainty about who will hold what responsibility. Will SEPA's role include the resolution of those issues or will you—or another minister—do that?

**Michael Russell:** The committee helpfully flagged up that issue in its inquiry into flooding. I recollect that from giving evidence to you. As a result of what you said, we took the issue on board when we drafted the bill, which strengthened the provision. The minister has an interventionist role, should that be required. That provision has been included in the bill as a result of questions that the committee asked.

The roles are quite clear. SEPA's role is entirely clear. The drafting of the bill has a certain elegance to it in terms of how it sets out the responsibilities. There is the national plan—well, two river basin plans, with a third one in the corner of the Borders that needs to be tweaked slightly, but we will not worry too much about that. There are also the catchment area plans, although we are not entirely sure how many of those there will be. That said, as they develop, things will become absolutely clear.

Furthermore, there is the process of mapping, by which the information is built up. Once the plans are in place, there is the responsibility of ensuring that they are implemented in some way or another.

The responsibilities are clear. The only slight vagueness relates to Scottish Water. As Dr Murray and other members indicated, once its flooding spending priorities and timescale of spending are aligned, the matter becomes entirely clear. In the end, the buck stops, as it has to stop, with the minister. If things are not happening, the minister will have to ensure that they do happen.

The Convener: A slight concern for us is that although you say things are clear, local authorities and Scottish Water are not taking quite the same position; they are telling us that they do not feel that it is clear. They say that they are not entirely certain who has responsibility for taking the lead on specific tasks. Although your clarity on the matter is not in doubt, lack of clarity continues to be an issue for local authorities and Scottish Water. The issue will have to be looked at.

**Michael Russell:** I take on board the fact that I have a role to spread clarity. We will certainly endeavour to do so.

The Convener: Thank you.

Peter Peacock will lead our questioning on funding.

Peter Peacock: There is a range of areas that we could get into; I will try to address some of them. Elaine Murray made the central point that also arose in the evidence that we heard from SEPA earlier this morning: like many others, including Scottish Water, SEPA made it clear that it sees merit in the long-term strategic view being taken. You have told us that you agree with that view. An allied issue is the need for an element of understanding-publicly and nationally-on the costs over a long period of time. What is your view of SEPA's role in all this? It has set out its view; do you share it? Is the view absolutely and explicitly agreed? Can you help me to understand whether SEPA has a duty under the bill to provide ministers with the kind of advice that it set out fully this mornina?

**Michael Russell:** Allow me to make several points about funding in response to that.

It is clearly understood that the means by which we have resolved to go forward is for local authorities to spend the money on flood management. There are other models: south of the border, the Environment Agency takes full responsibility for spending the money. That approach was a possibility for us, but from the beginning of the process of thinking about the bill—some of you were at the flooding summit that we held in Perth well over a year ago—it was absolutely clear that the vast majority of organisations in Scotland did not want that to be our approach. Instead, they wanted local authorities to be the key players. The implication is that the resources will be spent by local authorities. Therefore, in the spending review, we rolled up in the local authority settlement the money that is available in Scotland—the record sum of £42 million a year—on the basis of the formula that I outlined, which is well known to you.

If you accept that local authorities are the delivery mechanism, some other things flow from that. What other resources are required in relation to flooding and how should they be spent? I am thinking of flood warnings and flood alerts, the provision of which is a role that SEPA has undertaken. I have to say that it carries out that role, which will continue to be important, extremely well.

Given that the role of the responsible authority the authority with the national responsibility—is a role that SEPA should take, I accept that it should say to Government a variety of things about money. I heard the witnesses from SEPA mention one of those things this morning—the alignment of finances and how that should be managed. That is an entirely legitimate area for discussion and we need to examine it closely.

On the question of the research that needs to be undertaken into flooding, there is no point in a body such as SEPA carrying out its role if it cannot make recommendations and access research. Some money is spent on a national basis in relation to management, and that is SEPA money as well.

When we accept that there is a front-line delivery role and a national role in drawing up the plan—obviously, that is in the bill—we begin to understand much more clearly the lines of responsibility in relation to money. I do not foresee any difficulty with accruing the figures in the accounts and bringing together on an annual or triennial basis the money that is spent by Scottish Water, the Scottish rural development programme and other bodies to create an overall total for spending on flooding. It is a different argument to say that the money should start from a central pot and be distributed by Government. That is not what has been decided, so we are not operating in that way.

We are clear about how the money should be spent. I have read the committee's deliberations in the past month to six weeks. If the local authorities had said, "We do not want to spend this money. We want to give it back to the Government, which can make all the decisions on it," that would run counter to the bill and what we are doing. If COSLA had said that I would be honour-bound to consider the matter, but it has not said that and nor have the local authorities. In those circumstances, we are proceeding on the basis that the money will remain part of the local authority settlement and that the decisions will be made by local authorities.

I ask Dr Greig to comment.

Stuart Greig: There are two provisions that address the point about SEPA not having a duty and where the information on costs might come from. When it produces district plans, SEPA has to undertake a cost benefit analysis. It will not do individual schemes—local such work on authorities are well placed to do that-but it will undertake a cost benefit analysis of the plan, and that will provide information on the costs. Because it is a long-term plan, the analysis will give an understanding of the long-term costs and benefits, and that information will be made available to ministers.

The bill requires SEPA to set out an outline implementation strategy for the plan. Local authorities will be responsible for detailed planning of implementation, but SEPA has to produce an overview outline implementation strategy, which could consider specific issues such as recommendations on how things can be done better to make the plan work and be more easily delivered.

Those specific provisions allow for some of the things Peter Peacock suggests.

**Peter Peacock:** I accept what you say. I suppose my answer to the minister might be that, notwithstanding that, there is a need to be quite explicit. Given climate change and the need to protect communities, we have to have an open and clear debate about what it will cost. SEPA clearly thinks that it can play a role in that.

If we can find a mechanism to require such information to be in the public domain, we will be clearer about the decisions that are made on the basis of it, about the hierarchy of projects that SEPA talked about and about whether the £42 million is still correct. I am quite relaxed about local authorities spending the cash. The opinion has been expressed that we should firm up the bill to ensure that SEPA is clear about its strategic role in advising ministers about financial needs. It has also been suggested that the bill should require ministers to have regard to that when they are thinking about distributing cash to local authorities.

**Michael Russell:** You are addressing transparency about what we spend on flooding management in Scotland. The most negative debate would be reduced to, "You're no spending enough," "Aye, we are."

The money that is being spent is clearly going into recognised schemes that we all know are required. You know about the schemes in Elgin and other parts of Moray, and about a range of others in places such as Edinburgh, Glasgow, Renfrew and Argyll.

I would be happy if a system were developed that showed what is being spent and what the plans expect to be required, in the context of a series of variable estimates. There are no absolutes in this situation—I will give you an interesting example involving coastal flooding. It is possible to construct a series of estimates for what coastal flood defences might be required in various parts of the Western Isles—they would be on an enormous scale—and equally possible to make a smaller estimate on the basis that some of the current problems have been caused by bad engineering in the past; I refer to the issues with the South Ford causeway.

I would be happy if a range of estimates was made and there was transparency about resources. If we could find a way in the bill to ensure that that happens—we must remember that it is about structures and regulations, not specific sums of money—I would be happy with that.

**Peter Peacock:** I welcome that and look forward to seeing how it might develop. I am not talking about specific sums of money, which is to do with detailed decision making during any particular financing period.

Concerns have been expressed about whether ministers should be required to think about certain issues when they consider how to allocate the available money, so that they ensure that the big schemes that might require to be done in a particular time period are financed with help from the centre, through the distribution mechanism. I accept that it is difficult to tie ministers' hands although we might try—but do you accept that there might be some benefit in setting out in statute the kind of considerations that ministers ought to take into account when they decide how to meet national priorities?

Michael Russell: The bill already does that to some extent. Its very construction covers the existina need, the social and economic considerations, the way in which flood risk management has to build and develop, and how it must be a collaborative activity that takes account of development planning-we heard that question earlier. The criteria that should be applied are in the bill. If we go further than that we will be pretty close to telling a local authority that it has to have a local plan and telling it how to implement it. There is an element of flexibility on that in the bill, which recognises that there are various tools in the box, including natural flood management.

We are pretty close to what you are saying, although on this as on all other matters I stress that there is no such thing as a perfect bill or a perfect piece of drafting. If issues are not adequately covered in the bill, we will debate and discuss them. We are constantly aware of the issue of transparency.

#### 11:45

Peter Peacock: Scottish Water's activities are. to some extent, regulated by the Water Industry Commission. We have heard concerns that although Scottish Water might be under a duty to think about acting sustainably-as we heard in evidence last week-the WIC is not under a similar duty and it is possible that Scottish Water, in seeking to fulfil its duties, will operate under one set of criteria while the WIC, in helping to regulate pricing and charging, will not embrace the full range of considerations as Scottish Water has to, so its actions might be more limited than would otherwise be the case. Do you think there is a case for examining the operating instructions to the Water Industry Commission or what governs them, to try to ensure alignment?

**Michael Russell:** As I said in my response to Dr Wilson, there is a case for discussing the instructions to the Scottish Water Industry Commission with the responsible ministers. I do not need to remind you, Mr Peacock, that the Scottish Government has the word "sustainable" tattooed in the middle of its objectives. I do not think that any part of Government should operate in any other way but a sustainable one—and every part of Government should know that.

**Peter Peacock:** I readily accept that you have a tattoo somewhere that says "sustainability", but that is not the point—we need to know what the law says. If there is a disagreement in terms of the law, and requirements are placed on the Water Industry Commission, would it not be as well to tighten that up now while we have the chance, rather than leave the matter open to any doubt?

**Michael Russell:** I agree—that is why we are discussing instructions to the Water Industry Commission. I return to the point that I believe that every part of Government would want to look at its actions and ensure that it is operating sustainably—that includes the WIC as well as everyone else.

**The Convener:** I do not know whether there is anything left for Elaine Murray to ask.

**Elaine Murray:** Peter Peacock has covered a lot of the issues that the Finance Committee raised in its report. Scottish Government officials apparently confirmed to the Finance Committee that information on the costs that are incurred by various public bodies in delivering their new responsibilities could be included in the formal mechanism that the bill provides for reporting to Parliament. The committee wondered whether the Government intended to report formally to Parliament on the implementation of the bill and to include the costs in that.

**Michael Russell:** All three of us have said the same thing: we will look at it.

Liam McArthur: The Association of British Insurers raised concerns in its evidence to the committee about the need for a long-term strategy. It also suggested, in relation to the higher risk from multiple unaligned funding streams, that flood risk could be better managed if funds for flood risk management were separately identified and ring fenced for that purpose.

We have just received, before your arrival, what will no doubt become the historic concordat between the Government and the ABI. It appears—as an early success of your mission to spread clarity—that the issue of the long-term strategy has been addressed within it, but from the cursory glance that I have been able to give it I cannot see where the issue of multiple funding streams and unaligned funding streams has been addressed. Perhaps, as part of your mission to spread clarity, you could explain where that may have been addressed.

Michael Russell: I shall take it as a challenge to spread clarity to you, Mr McArthur. The historic concordat with the ABI, which I am pleased to be able to bring to fruition today, certainly considers the long-term window. We do not accept the point of ring fencing-I think I have made that clear in what I have said here; we accept the democratic right of bodies and organisations to spend the resources that they have. I am in favour of transparency in relation to those resources so that we know where the money is coming from and what the totals are, and where it is being spent. We will do our best to achieve that, but we have made a decision-not just in this area but in every area-that we should rely on local authorities to make their own decisions, and we will stick with that

**The Convener:** Bill Wilson has questions on coastal inundation, which is no surprise to the rest of us.

**Bill Wilson:** We heard evidence from SEPA earlier that 12m of Essex is being lost each year, and it referred to the possibility of our having to abandon some settlements in Scotland as sea levels rise. In view of that evidence, will you consider the possibility of prohibiting developments below a certain height above sea level? I mean in coastal areas; I am not talking about throughout the country. The ABI stated that its members use SEPA's maps and information when they determine the possibility of insuring new developments. Will you instruct that those maps allow for climate change in the coming 20 or 30 years?

**Michael Russell:** On the second point, I can see no reason why there should not be an estimate of possible climate change effect, although it is hard to make that estimate precisely.

On the first point, I am reluctant to give a blanket answer that we should prohibit development of any description. There are circumstances in which development in such areas is required, is desired by people and is a good thing. We must weigh the advantages and disadvantages carefully. Nobody can be in any doubt that development in an area that is at risk of constant inundation would be foolish. Nobody would want to do that. However, in other circumstances, if suitable defences can be found, development is the right thing to do. It would be foolish to talk about abandoning settlements or starting to name settlements and point the finger at them. People have lived and continue to live in areas that are at risk in a variety of ways and we must help them to do so if at all possible. I know some of those areas extremely well. In those circumstances, I want to help people adapt to change, rather than throw in the towel.

**Bill Wilson:** I accept that not every development should necessarily be prohibited. To take a simple example, if a farmer chooses to build a byre 10cm above sea level, that is his decision and it is hardly the end of the world.

**Michael Russell:** You are refining your question. You began by saying—

**Bill Wilson:** Okay, I spoke broadly. I am thinking of more significant developments, such as housing developments. The sea level rise may be 50cm, which we might be able to cope with, or it might be 5m, which we would have considerable difficulty coping with. A presumption against developing new settlements at, say, less than 1m above sea level would be a sensible precautionary move.

**Michael Russell:** Every planning authority is aware of such issues—they need to be aware of them. I cannot imagine a planning authority in Scotland that is not aware of the climate change issues. Authorities that have affected areas will want to bear those issues in mind but, at the end of the day, it will be their decision. I would be surprised if any major new settlement was planned in Scotland at 10cm above sea level. I would certainly not purchase property there.

**Bill Wilson:** Right—I will move on. A concern has been expressed to me that conflict might arise between the bill and the Coast Protection Act 1949. Are you aware of that concern and, if so, do you have any comments on it?

**Michael Russell:** That sounds like a concern on which Judith Tracey will be more than well informed.

Judith Tracey: Section 36 would place a duty on all public bodies to have regard to district and local flood risk management plans when exercising any functions that affect a flood risk management district. Under the Coast Protection Act 1949, local authorities are the competent authority on coast protection. In future, when an authority plans any coast protection work, it will have to take into account its flood risk management function. Therefore, the two could not possibly be in conflict.

**The Convener:** Alasdair Morgan has a couple of questions about reservoirs and hydrologists, so we may as well move on.

Alasdair Morgan: My first question is on national security, which I know is an issue that is dear to the minister's heart. SEPA told us that it wishes to have clarification on security issues in respect of reservoir inundation plans. Discussions seem to be on-going with DEFRA on that. People who are involved in flood management need to know what is likely to be flooded if a reservoir has a problem, but DEFRA seems to be unwilling to spread that information about, on national security grounds.

Michael Russell: It is even unwilling to give that information to ministers-officials get told such things more than ministers. Judith Tracey will, no doubt, have a response on that, although I am aware of the problem and that it is difficult to crack. I should make the serious point that our work on reservoirs is being done hand in glove with DEFRA-we think that that should be the case. That has been useful to us because aspects of reservoir legislation in Scotland need tidying up for two reasons. The first is that advantageous changes have occurred south of the border and the second is that the proposed floods and water bill south of the border will have a major impact on reservoir legislation and on the issues that the member raises. We are considering whether it would be appropriate to have a legislative consent motion on aspects of that proposed bill. However, a decision on that is some time away-it will certainly not happen in the present parliamentary session.

People who followed the Renfrewshire incident earlier this year will have realised that reservoir legislation in Scotland needs sharpening up. I have been concerned about the matter for some time. How best we sharpen up the approach is the issue. The bill is only the start of the process.

Judith Tracey: National security has been extensively discussed since the issue came up when the Water Act 2003 conferred on ministers a

power to acquire inundation maps. The power has not yet been enacted, for the simple reason that there has been much discussion about who should see the maps, how they should be stored and who should have access to them. Much discussion has focused on security, and inundation maps have not yet been produced in England and Wales.

Agreement has been reached with the security services that category 1 responders should have access to the inundation maps. I think that it was agreed that that will happen in a controlled environment. Maps will not be handed out to everyone; the people who produce them will hold them and give access to the equivalent of strategic co-ordinating groups in Scotland, for civil contingencies and emergency planning purposes. The maps will not be distributed more widely.

**Alasdair Morgan:** How does that affect timescales for planning that must be done in the event of a legitimate emergency?

Judith Tracey: That is a bit of a moot point, given that the inundation maps have not yet been produced. Some larger reservoir undertakers have produced inundation maps for their own purposes, so that they know where the water would go. I think that it has been agreed that they will make their maps available to the English equivalent of our strategic co-ordinating groups, to be used for emergency planning purposes.

In Scotland, the general approach is to have a generic emergency plan, which can be used in all circumstances and can be adapted to a particular emergency.

Alasdair Morgan: Is the current situation satisfactory?

**Michael Russell:** I do not think that it is satisfactory, which is why we have strengthened the approach by including reservoirs in the bill and are considering moving our legislation forward, in line with legislation in England and Wales.

I was particularly concerned by the incident in Renfrewshire, which involved a reservoir that was in a category lower than the category that would be reported and had the potential to cause damage. The weakness in the reservoir was not anticipated-it seems that something had gone wrong with the maintenance. In such circumstances it is clear that the legislation in Scotland needs sharpening up. That is why reservoirs are in the bill, but we have more to do in that regard.

I understand the security issue and I appreciate its sensitivity. We need to resolve it in the Scottish context as soon as possible, with the assistance of DEFRA. To be fair, DEFRA is being positive in giving such assistance. Alasdair Morgan: When might inundation maps be available—at least to someone—for all major reservoirs in Scotland?

Judith Tracey: We informed the committee that we intend to lodge an amendment on on-site plans. Such plans are likely to require maps that show where the water would go. If the amendment is agreed to at stage 2 and the bill is subsequently passed, I imagine that it will take a year or two to produce plans.

**Michael Russell:** Mr Morgan is a fair-minded man and will realise that the emergency services in areas that are served by large reservoirs are aware of the issues and factor into their thinking the possibility of difficulties with dams or similar structures. What the emergency services have is not as good as a full inundation map, but it is not nothing; we are assured that they are prepared for such circumstances.

Alasdair Morgan: My second question is about the difficulty that various people have flagged up to us about the current shortage—which may get worse—of hydrologists and other trained engineers. The shortage will be affected by the fact that other countries are due to implement similar measures and by the fact that such engineers seem to be easily attracted by private firms to act as consultants. Presumably the demand from those firms will increase. How will we address the current shortage, which will get worse in the very near future?

#### 12:00

**Michael Russell:** It strikes me that SEPA gave a positive answer to that question earlier. Positive engagement is taking place with universities, trainers and others to ensure future supply. We are looking at retraining people with other engineering skills. I am in contact with my opposite numbers in the education portfolio to encourage them and to highlight the opportunities. We should also tell people that, for the foreseeable future, there will be major opportunities to become an hydrologist. It strikes me that if anyone in the room is thinking of retraining, that would be a good opportunity.

Alasdair Morgan: Thank you, but I will not take up the option just yet.

As always, cash seems to be an issue on the education side. Where does the budget for such retraining lie? Will it need to be funded by education in competition with other priorities?

**Michael Russell:** I am not sure that there is a major cash issue, as that issue has not been central to our thinking. It should be possible for small amounts of resource to be found from flooding research and other areas if new courses

need to be provided. However, I think that the issue is getting the individuals rather than the cash.

**The Convener:** That completes our questions to the minister. We have given him mercy for the final 10 minutes as we will now move on to a different agenda item. I thank the minister and his officials for their attendance.

## Marine and Coastal Access Bill

12:02

**The Convener:** Agenda item 5 is consideration of an approach paper on the legislative consent memorandum on the United Kingdom Marine and Coastal Access Bill. The paper has been circulated to committee members. The proposed approach, which is outlined in the paper, includes requesting written evidence from affected organisations and holding an evidence session with the Cabinet Secretary for Rural Affairs and the Environment.

Do members have any comments on the suggested approach? Alternatively, if members prefer, they can e-mail suggestions about who should be invited to provide written evidence. Either way, it is over to committee members. Do members have any immediate thoughts, or would they rather make suggestions by e-mail?

**Peter Peacock:** We can make suggestions by e-mail. The approach paper seems fine, so we should approve it.

**The Convener:** Okay. Everyone seems happy with the suggested approach and with the proposal that suggestions can be made by e-mail. The paper suggests that we will take evidence from the cabinet secretary on 28 January.

That concludes the public part of our meeting. I thank the public for their attendance and ask them to clear the room.

12:03

Meeting continued in private until 13:04.

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