



Northern Ireland  
Assembly

Committee for Agriculture and Rural  
Development

# OFFICIAL REPORT (Hansard)

Reservoirs Bill: Department of Agriculture  
and Rural Development and Rivers Agency

11 February 2014

# NORTHERN IRELAND ASSEMBLY

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**Members present for all or part of the proceedings:**

Mr Paul Frew (Chairperson)  
Mr Thomas Buchanan  
Mrs Judith Cochrane  
Mrs Jo-Anne Dobson  
Mr William Irwin  
Mr Declan McAleer  
Miss Michelle McIlveen  
Mr Oliver McMullan  
Mr Ian Milne  
Mr Robin Swann

**Witnesses:**

Mr Kieran Brazier	Department of Agriculture and Rural Development
Mr David Porter	Department of Agriculture and Rural Development

**The Chairperson:** I welcome from Rivers Agency David Porter, who is a grade 6, and Kieran Brazier, who is a grade 7. Thank you very much for coming here today for what is the beginning of a lot of important work on scrutinising the Reservoirs Bill. If you want to start by giving your presentation, we will go into questions after that.

**Mr David Porter (Department of Agriculture and Rural Development):** Mr Chairman and Committee members, thank you for the opportunity to address you. I am conscious that Mark from the Assembly Research and Information Service (RaISe) covered a considerable amount of the ground, so I will pick out a small number of key issues and take a moment or two to provide some clarification on them. We are then happy to take any members' questions.

I will deal with three areas: the policy context; the timeline, which I think will help the Committee understand when, in particular, a grant-aid scheme may be required; and terminology. We listened to the Second Stage debate and have considered some of the other conversations that have been had about the Bill, and we think that clarification is needed. Some of the words are quite familiar to us because we deal with the subject day in, day out, but some may have a different meaning and context.

First, I really want to focus on the EU floods directive. It was a considerable issue in the debate in the House, and I want to make absolutely crystal clear to people the context of the floods directive. I do not want to go through the whole history — I have given you that a number of times before — but, in order to give the context, I need to go through the previous legislation.

The first legislation was introduced in GB in 1930 and subsequently amended in 1975. However, that legislation does not apply to Northern Ireland. That is the legislative context. There are mentions of reservoirs in Northern Ireland legislation in the Drainage (Northern Ireland) Order 1973 and the Water and Sewerage Services (Northern Ireland) Order 1973. The latter stated that regulations could be brought forward to ensure the safety of reservoirs, but no regulations were ever made under the order. That situation was identified in the independent flood management policy review, which was undertaken in and around 2007. In September 2008, the document 'Living with Rivers and the Sea' was made public. It is the Government response to the Northern Ireland policy review. Paragraph 7.4 deals with reservoirs and states:

*"Other regions of the UK have introduced independent control to ensure the safety of large raised reservoirs."*

There is then a highlighted section. In the document, highlighted sections detail the recommendations, and the recommendation there is:

*"Appropriate legislation will be proposed to provide for regulatory control of reservoir safety in Northern Ireland by Rivers Agency."*

That is where the more recent policy context started.

Parallel to that, we have the EU floods directive. It came in in 2007 and was transposed in 2009. It has been claimed that it relates only to rivers and the coast, but that is a misunderstanding of the directive. It is not restricted to rivers and the coast, and article 2.1 defines a flood as:

*"the temporary covering by water of land not normally covered by water."*

The directive does not state that the water has to come from rivers or the coast. It has a very loose definition. The directive does refer to providing information in the case of river basin districts, units of management and coastal zones. However, that refers to geographical areas, not the source of the flooding.

The way in which European legislation is brought forward is that it is cleared in the European Parliament before going to member states. The legislation is Europe-wide, so it cannot be prescriptive in every detail, and there are some flexibilities for member states. The European Commission ensures that the flexibility between member states is controlled or reasonable by bringing forward the common implementation strategy (CIS), which requires a working group — in the case of the floods directive, it was working group F — to come together to discuss issues of commonality or where it is unclear what something means.

One of the issues discussed by working group F was what a flood is and what the scope of a flood is, as the definition is so loose. Working group F discussed that a number of times. It decided that the answer was not entirely clear and that it would set up a smaller working group of interested representatives from key member states to look at the issue. That was done, and the group produced a paper on 18 October 2010. We can make that available to the Committee. The paper referred to dam breach, stating:

*"There was not however unanimous agreement on whether floods arising from the breach of flood defences with a very high standard of defence ... or from dam breach events should be within the definition of the Directive."*

Therefore, that small working group of representatives from core member states looked at the definition, argued it back and forward and produced a paper that suggested that they could not agree on it. The Commission had to take that paper and, at the working group F meeting of 28 October 2010 in Brussels, which, incidentally, I attended, not as a representative of Northern Ireland but the whole of the UK, the Commission's spokesperson reiterated that the definition in article 2.1, the one that I quoted earlier, did not:

*"give the possibility to exclude such floods from the scope of application of the Directive, and such floods shall clearly be part of the scope."*

The words "such floods" refer to floods from dam breaches.

That is the European Commission saying to the member states, "I know that you've gone away and had a look at this. You couldn't decide among yourselves, so the Commission is stepping in and saying that its interpretation is that flood risk from a dam breach is within the scope". The Commission reiterated that article 4 of the floods directive, which I will deal with in a moment, gives the possibility to member states to define "significant flood risk". It did that because there is not the same flood problem across the whole of Europe. The European Commission did not say, "Here are the floods that you have to consider". Instead, it said, "Member states, look at your flood risk, assess your flood risk, and, from that information, determine what is significant in your context".

Text from the preliminary flood risk assessment (PFRA) was quoted from in the House last week. The first paragraph of the Rivers Agency document sets out the significant flood risks in the context of Northern Ireland. It states:

*"The PFRA considers flooding from all of the main flood sources including rivers, the sea, surface water runoff (also known as pluvial flooding) and impounded water bodies (such as dams and reservoirs)."*

That is what was determined for Northern Ireland. It was claimed that the justification for the Reservoirs Bill was the floods directive. The justification for this legislation is not, and has not been claimed to be, the floods directive, but the directive does provide the background, as we had to look at all the significant flood risks across Northern Ireland and determine what is significant. The PFRA goes on to state that a flood from a reservoir could be significant because reservoirs are not regulated. We do not know the condition of them, and we do not require any inspection or maintenance of them to be undertaken. As a result, that could present a very significant flood risk. We just do not know, because we have not got the information.

The report goes on to argue that by requiring owners to have their structures inspected, to carry out routine maintenance and to keep a close eye on them, there will not be the same risk, because this legislation deals with the risk that reservoirs pose. Therefore, it is the Reservoirs Bill that stops the risk from our reservoirs being significant in a European context.

Hopefully, we did not misrepresent the situation. It was the information from that analysis that gave us the 66,000 people that are in the potential flood inundation area. It was claimed that that was ridiculous and that all the reservoirs could not breach at the same time. I said exactly the same thing to the Committee. It is ridiculous — we do not expect all 156, as assessed by the PFRA, to breach. This is about trying to get some sort of indication of what we are talking about here and establish the relative importance of the issue as a piece of work for us as a Department and you as a Committee. Nobody is claiming that all 156 will fail at once, or that we will have to deal with a situation in which 66,000 people are simultaneously being impacted on. All that we are doing is trying to quantify what the impact may be.

That hopefully gives you some information on the policy context.

Secondly, I thought that it might be useful to set out the timeline for a number of key steps, because we have a difficulty in putting forward a case for, as Mark outlined earlier, a grant-aid scheme. We have a difficulty finding justification for that.

I want to demonstrate why we have that difficulty. It is purely because of the time allowed for various steps in the legislation. The first step is that owners have to register to say that they own a body of water greater than 10,000 cubic metres that is an impounded structure; that is, a controlled reservoir. In the legislation, owners are given six months to register. Following that, the legislation requires the Department to take a decision on the designation as soon as possible. For the sake of argument, let us say that it takes us two months to assign that. The reservoir manager receives that decision, after which he or she has six months to put a supervising engineer in place. Following that, the supervising engineer, in the absence of an inspection report, will call for such a report. The supervising engineer will have a further 12 months in which to carry out the inspection report and a further 28 days before it has to be forwarded to the Department.

If you add all that up, it comes to 27 months. If we assume that we get Royal Assent in the current calendar year and, for the sake of argument, commence the legislation in April 2015, we will not have the information on the state of the reservoir stock until July 2017. It is only at that point that we will be able to determine with any degree of certainty the size of the bid that we need to make. That is why we have been saying that that is in the next comprehensive spending review (CSR) period and will

need to go to the Executive at some point. We are not fobbing anyone off; rather, we genuinely do not have the information because of the timeline.

However, we may know something sooner than that. I have talked about the maximum dates, but some owners may well register a bit quicker. For the sake of argument, someone could register in one month, and we could decide the designation straight away. A supervising engineer could be appointed in one month, submit an inspection report in another month and then give it to us straight away. We could know some of what the situation entails four months after commencement, but we will not know about all the reservoirs until we have exhausted the timeline, which could be well into the next CSR period and the next Assembly mandate. I hope that that has given you an understanding of some of the difficulties surrounding the timeline.

Thirdly, I will deal with terminology. I want to explain two words that we use in the legislation: "abandonment" and "discontinuance". We do not use the word "abandonment" in the context of ownership. It is not that an owner says that he is abandoning the facility and is walking away because it is not his any more or, to pick up on points made earlier, that he is abandoning it because he cannot afford it. It does not mean that. "Abandonment" means, in the sense of the legislation, that, where a reservoir is made to no longer be capable of holding water, an impounding structure would need to be removed. It is not about ownership but about the physical presence of the dam structure and the capability of that structure to impound water.

We use the word "discontinuance" where an owner has a large reservoir, does not wish to be subject to the legislation and, in order to do that, wants to reduce its size. In that case, the reservoir remains capable of holding some water but not above the 10,000 cubic metre threshold. The reservoir is then deemed to be discontinued; that is, it is made smaller. I thought that it would be useful for members to be absolutely clear on the context of those two words.

I hope that I have given you some understanding of the policy context, particularly where the floods directive has been driving us as an industry, where the numbers came from, the timeline, the challenges that we have in trying to quantify the size of any future grant-aid scheme, and some clarification of the terminology that we use. Thank you for your time. I am happy to answer questions.

**The Chairperson:** Thank you very much for that, David. I want to ask you about the classification of risk. A reservoir is assessed as being high, medium or low risk, as defined in the Bill at clauses 22 and 23. How are we to be sure that that methodology is the correct one and that the classifications are appropriate and proportionate, considering that there is a differential between Scotland and England? England has just high and low, and there does not seem to be much difference between medium and high.

**Mr Porter:** For clarification, England has high and nothing. Reservoirs are classified as high risk or they are not classified at all, which presents problems, because, if you are required to make a judgement between high and nothing, you are almost saying that there is no risk. We are getting feedback from the industry that that is causing problems. Are we brave enough as engineers to say that there is no risk? It is not even that it is low risk; it is just high risk and a void.

We tried to ensure that there was a measurable methodology, so we have flood inundation maps from which we can determine the number of properties in an area. The responses to our public consultation said that the on/off switch between high and low is not representative of our reservoir stock in Northern Ireland. The rationale was that, although there are flood inundation maps that show property in the flood outline, it may be far down where the water spills. By the time the water got down to them it might be shallow and slow-moving and not cause any obvious harm, so we had to make a distinction between structures that would cause a wall of water or deep, fast-moving water, which is what kills people, and structures with shallow, slow-moving water.

The distinction between high and medium is that high is where it is foreseeable that somebody could die because of the speed and depth of the water. Medium is where they might still get wet, or the area that they live in might still get wet, but, because of where the houses are situated in the flood inundation area, it is foreseeable and you can react. You would still survive it as it would not be fast-flowing or very deep. That is the distinction between high and medium.

**The Chairperson:** Really, the difference between high and medium is the risk of death.

**Mr Porter:** The foreseeable risk of death, yes. That has a knock-on effect on how we require it to be managed, but that is the difference in designation.

**The Chairperson:** How do you factor the state of the reservoir into the risk-management scale? You could have the equivalent of the Hoover dam in an area with a large population centre. The owner might have purchased it when there was no population around it, but one has built up. Therefore, even though he has built a modern, state-of-the-art dam, he may find, through no fault of his own, that it could still be deemed to be high risk, which could place a burden on to him.

**Mr Porter:** That is correct. The reason is that he has the potential to cause significant harm; therefore, he must be subject to a high degree of regulation. He has to have a high degree of inspection and maintenance, as that allows that person to sleep in their bed at night. They know that, by being compliant, all reasonable steps have been taken to ensure that the big body of water that they own does not cause harm to a downstream population.

It is also worth clarifying that what we are really talking about is impact. There is a great deal of talk about the risk-based approach. However, I urge caution on that. At present, there is no industry-agreed way of determining the likelihood of failure of a reservoir. That is why we were clear through the public consultation and in our documentation that we are initially bringing forward a classification based on the potential impact of a structure. So that we are future-proofed and do not have to revisit the primary legislation, we are including other factors, such as pollution and the historical maintenance of a structure. However, there is no agreed industry standard; it comes down to a particular engineer's views on the likelihood of failure. The right and proper way of dealing with those reservoirs is to say, "We require you, the owners of high-risk reservoirs, to keep them to this particular standard". That is what the legislation will do.

For those that would cause less harm, there is a slightly less onerous requirement. For those for which we cannot see significant harm, we will exercise a very light touch. Hopefully, that is what we have set out in the legislation.

**The Chairperson:** What burden is on the person who has a state-of-the-art reservoir? How many inspections per year? If it is a modern, state-of-the-art reservoir, what relaxation could be made to relieve the burden when you know that the reservoir owner is responsible, has always made the investment when needed and has a best-practice model?

**Mr Porter:** Rather than relaxing the minimum standard, we need to look at it the other way. We are setting at least two visits a year by a supervising engineer for high-risk structures, so for those who own an old, ropey clay bank that has not been well maintained and about which they are a bit concerned, the supervising engineer should be saying that two visits are not enough. The engineer should be saying, "We are going to do many more than two in order to provide assurance that your structure is not moving, leaking or at the point of breach".

The minimum standard is at least two visits per year by a supervising engineer, although a supervising engineer can do more inspections for structures that owners are more concerned about. Rather than relaxing the minimum standard, we have put in a standard that we think is reasonable for all except when we are concerned, when more inspections will be required.

**The Chairperson:** Would it be possible for the Rivers Agency to provide the Committee with the differentials between what you hope to bring into play in Northern Ireland and England, Scotland and Wales with regard to the methodology of the risk assessment? I hear what you are saying with regard to a risk-based structure, but providing that information would give us a fuller picture.

**Mr Porter:** Yes.

**Mr Kieran Brazier (Department of Agriculture and Rural Development):** My understanding is that, during the consultation, the Department and the Rivers Agency proposed a two-tier approach to high and low. It was not until stakeholders suggested, in response to the policy development phase of the consultation introducing a medium category, that it found its way into the legislation.

**Mr Milne:** Who appoints to the panel of engineers and where do you get the expertise? Are there enough engineers here with the expertise to deal with such work?

**Mr Porter:** The Institution of Civil Engineers has a reservoir panel in London to assess candidates. Robust criteria require evidence that you have experience in the area, that you are well trained and have the skills and competency. The panel does not appoint; it makes a recommendation under the 1975 Act in GB to the Secretary of State. Under our legislation, the recommendation will come from the same panel or committee but will go to the Department, which will draw up a list of people suitable for the various grades of engineer. That is a well-trying and tested process.

What we did not want to do in the policy development was reinvent the wheel, as that would have been a burden on engineers, who would have reflected it in the price. If a reservoir engineer in England wants to work here — having gone through a certain registration and a parallel, but different, system with an associated cost — all they would do is up their price in order to reflect that. At an early stage, we agreed with England, Scotland and Wales that we wanted to use a single committee to make recommendations to the various devolved Administrations, which would then allow us to take that forward. Hopefully, that has dealt with the "who".

As regards quantity; I am a member of the Institution of Civil Engineers, but I do not sit on the reservoir committee as a member of the institute; I sit on it as a representative of the reservoir authority in Northern Ireland in readiness for the legislation. There has been much debate about the age profile, the capability of engineers because of the ageing profile, in particular of inspecting engineers, and also the future need to encourage more engineers into the area. The institution has agreed to bring forward the key players: the large water companies in England, because it is not just a concern for Northern Ireland; the key employers of reservoir panel engineers; the institution and other interested people. They will have a workshop before the next reservoir committee, which is in about three months' time, to deal with issues such as how we can encourage young engineers to see it as attractive work.

They have, however, concluded that, at present, there are sufficient numbers, although they are worried about the future. I see quite a number of applications being dealt with by the committee, both renewals and new applicants. I would not be as concerned in the short term, and certainly not on introduction, about the number of reservoir panel engineers. However, it is something to keep an eye on in the longer term. It is not peculiar to Northern Ireland; it has been identified across England, Scotland and Wales as well.

**The Chairperson:** Does the panel of engineers quantify risk?

**Mr Porter:** No.

**The Chairperson:** Who does?

**Mr Porter:** The Rivers Agency.

**The Chairperson:** Will it be done in-house?

**Mr Porter:** Yes. We started to use a panel to do it. However, we have used a panel too often. So there will be a reservoir committee — although that title is used as well. A group of people will be pulled together in the Rivers Agency so that the decision does not rest on one individual. They will look at the flood inundation maps and at any other information that the manager provides. The group will also hear the first informal appeal. So if, when the initial designation decision is given, the manager wants to challenge our maps or provide us with different information, that group of people will hear it informally before we get to a final designation. We plan to do that in-house rather than outsourcing it.

**The Chairperson:** With the need for three or four different types of engineers, such as supervising engineers, the list could go on. Could costs spiral out of control?

**Mr Porter:** Interestingly, some of the panel engineers argue the opposite, as a number of firms are very specialist in that area; they feel that they are underpricing their expertise. It is probably driven by procurement and the ability to get onto frameworks. Some of the large companies recognise that the cost of not getting onto a framework is grave for them because other associated work is packaged out of the framework. I have heard the argument that it is a race to the bottom as opposed to necessarily an elevation of the price. Therefore I do not think that there will be a problem.

Although we do not have many panel engineers who work and reside in Northern Ireland, it is not a difficult to get back and forth to England. The role of the inspecting engineers is clear: to inspect on a particular day and produce a report. That satisfies the requirements of the legislation. As they are not involved continuously, an inspection engineer could fly in, carry out their role adequately, complete the report and then return to wherever they are based. I do not see an issue, certainly not for the inspecting engineer.

There is a question about the supervising engineer. You will be getting a number of supervising engineers from the Institute of Civil Engineers before the Committee. I would ask them those questions, particularly what number of reservoirs they, as individuals, would be comfortable managing. They will be able to articulate what personal responsibility they feel for their structures. They would be better placed to say, "I would be comfortable looking after two, three, four, or five." I know that you have already approached supervising engineers, so some of those questions may be better teased out with them.

**Mr Swann:** How many engineers at each grade are there in Northern Ireland?

**Mr Porter:** At present, only one supervising and one inspecting engineer live in Northern Ireland, and another supervising engineer is training. Those guys are from multinational firms. You asked, "Who else is there?" They do not have many, but they have others. I would be not overly concerned about the initial inspection and not at all concerned about the inspection. If there is an issue with the initial phase of supervision, it is around that area. Again, I would address that one to the institution when it comes to talk to you.

**Mr Swann:** The registering body that you talked about is based in London. Is there a registered company south of the border? You are talking very specifically about those resident in Northern Ireland.

**Mr Porter:** Many of the companies that we deal with are not just GB-, UK- or these islands-wide; they are multi-nationals, such as Atkins and URS/Scott Wilson. They are huge firms that operate across the globe. Some are involved in Southern Ireland, although not so many, because they do not have any legislation. Neither do they have as many reservoirs because Northern Ireland and Southern Ireland developed in slightly different ways. The economy in Southern Ireland was much more agriculturally driven in comparison to the industrialised employment that we had here with mills, shipbuilding, rope-making et al. The South does not have as many reservoirs, and they tend to be managed by the Electricity Supply Board (ESB) as part of its large hydroelectric schemes.

**Mr Milne:** I take it that engineers have surveyed all 151 structures.

**Mr Porter:** No.

**Mr Milne:** So there is no engineer survey of any of them.

**Mr Porter:** There is an engineer survey on quite a number. We have been very careful in the legislation to recognise surveys, provided that they meet a certain standard.

**Mr Milne:** So those will stand.

**Mr Porter:** They will. There is no nugatory work done. If anybody wants to anticipate the legislation and get in first, they will be encouraged to do so. Northern Ireland Water structures are inspected, as are the structures that we maintain in the Department. We have panel engineer reports, and we know from talking to councils that they have had panel engineer inspections on their structures.

**Mr Milne:** So, it is the private structures that are not—

**Mr Porter:** Yes. Some of the private structures have been assessed for particular reasons. If they were part of a development, if their owner had to put in a planning application and was concerned about the structure, or if they were looking to develop a hydroelectric scheme, the first thing they would do is get a dam engineer out to do an assessment to see how good it was or to see whether it was worth spending money on it. It is not that none of them has inspections, but they are the structures that we are more concerned about.



**Mr Irwin:** I apologise for leaving earlier, but I had to ask a question in the Chamber. You are proposing that 10,000 cubic metres be the level that defines a controlled reservoir. Why do you feel that that is the correct level? Ten thousand cubic metres is not a massive amount of water.

**Mr Porter:** Ten thousand cubic metres is the level that Great Britain is moving towards, although at different rates in different areas. That question would have been much easier to answer three years ago, when it was nice and clean and tidy. It is not quite as clean and tidy today. The 1975 Act required reservoirs that had 25,000 cubic metres or more to be regulated. The Pitt review into serious flooding recommended that that threshold be looked at, and smaller reservoirs were brought in. That was subsequently enacted through legislation in England and Wales. As you heard from the researcher, the Scottish decided, rather than become embroiled in that, to bring forward a stand-alone piece of legislation. To-day, reservoirs in Scotland with 25,000 cubic metres are regulated, and Scotland has legislation that brings that down to 10,000 cubic metres. Wales is regulated to 25,000 cubic metres, and it has legislation, which its Ministers are content with, to bring it down to 10,000 cubic metres. In England, they regulate 25,000 cubic metre reservoirs, and they have legislation to bring that down to 10,000 cubic metres. The decision on whether that will be enacted as phase 2 of the Flood and Water Management Bill is sitting on a Minister's desk, as we speak. Therefore it is a slightly different position.

When we started to write the legislation, it was easy; everyone was going to 10,000 cubic metres, so we went to 10,000 cubic metres. Given the changing position, we asked the Institution of Civil Engineers whether we had got it right. We asked if 10,000 cubic metres was reasonable, and it has confirmed that, in its view, 10,000 cubic metres is the level that could cause harm if its water were released. They are the guys who manage reservoirs and who have experience in the area.

To give you some comfort, I will play with the 10,000 cubic metres. As we know, 10,000 cubic metres gives the figure of 151 structures; upping it to 15,000 cubic metres would reduce the 151 to 132 structures. Going to 25,000 cubic metres would reduce the number to be regulated to 120. I do not think that that tells you the whole story, because it looks worth exploring. More interesting are the structures in private ownership. Let us look at 10,000 cubic metres and focus on the high-impact or high-risk structures. From our investigations, the initial number of high-risk structures greater than 10,000 cubic metres in private ownership is 24. If we up that to 15,000 cubic metres, there are still 24. That means that there are no privately owned reservoirs in high-risk designations between 10,000 cubic metres and 15,000 cubic metres. If we upped it to 25,000 cubic metres, the 24 goes down by one to 23 structures. Therefore the real beneficiary of changing the threshold would be the public sector. As you heard earlier, we are probably not that concerned about the burden on the public sector because most reservoirs are regulated in the spirit of this. This is not a financial burden on public sector owners because they already understand the risks associated with a reservoir and they already carry out inspections and maintenance. There is no real benefit that I can see, other than for that one group, which changes from 24 to 23. I am not sure where that one is, and we have not looked at it.

We can do the same exercise for the third sector with the 10,000 cubic metre threshold. We are dealing just with the high-risk structures, of which there are eight. If we increase the threshold to 15,000 or 25,000 cubic metres, we still have eight structures. Therefore there is no benefit to the third sector in changing the threshold. The benefit is largely to those that are in public ownership. I am not sure that I would encourage you to do that, as there would be no measurable benefit. There would not be a reduction in the burden on the public purse as a result of changing the threshold, although I am happy to be challenged on that or to look at the figures differently if you wish.

**Mr Irwin:** Thank you. I, for one, would have thought that there would have been a bigger difference.

**Mr McAleer:** I want to ask about the part of the Bill that deals with enforcement and offences. In your paper you set out the different levels of fines, which range from £2,500 and £5,000 right up to imprisonment. Are those penalties appropriate and proportionate? How do they compare with other jurisdictions where such legislation has been introduced? I understand that a table is to be published illustrating offences and penalties. When will that be published?

**The Committee Clerk:** It is in the pack.

**Mr McAleer:** Is it available in the pack? Thank you, Stella; you can omit that last sentence.  
*[Laughter.]*

**Mr Brazier:** I have been comparing the Northern Ireland Reservoirs Bill with that which is proposed for Scotland, but I have also been looking at England and in particular at the levels of sanction in Scotland for stop notices. There are three clauses in the Reservoirs Bill that deal with civil sanctions and 16 that deal with criminal sanctions. Scotland has all but one of those clauses in its Bill. To a large extent they mirror our approach to this and we mirror theirs.

The Reservoirs Bill contains all three civil sanctions and all but one of the criminal sanctions so, as Mark said, there are a few minor differences in the criminal sanctions. We have a penalty for six months' non-compliance, whereas Scotland has a 12 months' non-compliance penalty. It is my understanding that that is more to do with a quirk in the legislation than a policy intent, because the same policy intent is there. The policy intention of the Reservoirs Bill in England, Scotland, Wales and Northern Ireland is to seek agreement and cooperation from the reservoir managers, to work with them and to help them to understand their responsibilities and to get them to do that voluntarily. It is only where that starts to fail that we get into considering civil or criminal sanctions. The major difference between our enforcement system and Scotland's is the stop notice.

Stop notices are just what they say they are. By issuing one, we want somebody to stop doing something that is very dangerous, and we would only issue one when it is really necessary to do so. We also want to have as much of a deterrent as possible for non-compliance with a stop notice. When considering the best deterrent, we looked around the rest of the United Kingdom. In England and Wales, the level of penalty in their reservoirs Bills is the same, with six months' imprisonment and a £20,000 fine. Scotland differs significantly, and, I would suggest, is too lenient. If somebody fails to comply with a stop notice in Scotland, they will, on summary conviction, receive a maximum of 60 days' imprisonment and a fine of £2,500. That is completely out of kilter with what is proposed in England and Wales and what we are proposing here.

It is about trying to deter somebody from doing something. In Scotland, the penalty for indictment for a first offence is three months, a fine, or both, although the maximum fine in Scotland is £50,000. It goes up. Ours is 12 months' imprisonment with a fine on first conviction and two years imprisonment or a fine for a second offence. A second offence in Scotland attracts a penalty of six months' imprisonment, a fine, or both. There is a significant difference between our proposed system and the one in Scotland. England, Northern Ireland and Wales are taking exactly the same approach.

The policy intention throughout the United Kingdom is the same, but in Scotland the penalty regime is significantly different. I suggest that the system in Scotland is a bit too lenient when it comes to the degree of offence that we are talking about.

**Mr McAleer:** I want to ask one other question. Community and voluntary organisations, including those in my community, have taken on the leases of reservoirs for community development purposes. If a group takes on that responsibility corporately, who would you pursue in order to impose those fines or serve enforcement or stop notices? You probably know that membership changes in many organisations, and the fortunes of groups change too, and it is just not as consistent as having a single owner. I am anxious that this could be a bit off-putting for voluntary organisations, who might feel that they are taking on an extra liability that could be prohibitive for them.

**Mr Porter:** There are two aspects to this. I encourage organisations that take on such responsibility, particularly responsibility for a lease, to make it very clear who is responsible. Mark raised the issue of recreational users of reservoirs, and I encourage those who lease facilities to look at those leases and make sure that they do not say, or that it could not be read into them, that they are responsible for water level management. That will be one of the measures that we will apply, and now is the opportunity to draw this to the attention of owners from whom they lease the land, and clubs, so that we do not get a situation such as the one you have described.

Individuals will have to register as reservoir managers and, where there are multiple managers, the legislation allows for a lead reservoir manager who will be responsible. Again, I urge caution, particularly to people to gain an understanding of what this means, because there is the reservoir owner who owns the ground and then there is, potentially, the organisation. There needs to be a discussion about who is responsible for making sure that the reservoir is safe, carrying out routine inspections and, ultimately, giving us an assurance that the reservoir is being managed in an appropriate way.

**Mr McAleer:** Many organisations have entered into 20- or 30-year leases for reservoirs, as levering funding from particular programmes may have required them to take on such a lease. What you are

saying is that they must now start to go through those leases to find out who is the reservoir manager. If that is ambiguous, will that potentially require some negotiation with the owner and amendment of the lease?

**Mr Porter:** It is not a requirement and I am not saying that they have to do it. However, I would do it if I were on the board, panel or committee or in charge of some of those groups. I would want to gain an understanding of what I was responsible for. If it is not clear, I would seek a way to address that and make it clear what the responsibilities are. There may need to be some negotiation, but it is not a requirement of the legislation, rather it is a consequence of it. We do not require those leases to be reviewed, but it would be a very wise move to get that clarified so that we are not dealing with it in an emergency or enforcement situation, and that we do not get to the point of having to enforce on community groups and individuals. I encourage people to get that tidied up now rather than waiting.

**Mr Brazier:** A clause in the Bill deals specifically with partnerships, responsibilities within partnerships and individuals in partnerships. I think it is a standard clause. It makes it clear that, if any individual commits an offence, they commit it on behalf of the partnership. It is not as though someone in a partnership can take on the responsibility for the reservoir, do something against the law, and that the rest of the partnership can say that it was that person's responsibility. That is not the case. They need to be very careful about what is in their leases and contracts for reservoirs. It is clause 115, if you want to have a look at it.

**The Chairperson:** You can see the difference between Northern Ireland and Scotland regarding convictions. To be clear and for the record so that we are all clear, if there were a breach, and hundreds of houses were flooded and, God forbid, somebody died, what would the manager be looking at? Would they be looking at the six months' imprisonment and the £20,000 fine or would that be a whole different ball game and scenario as regards the law? They could be looking at manslaughter.

**Mr Porter:** That would be a different circumstance. The offence and penalties are for non-compliance with the Reservoirs Bill. By carrying out that duty, you would be managing the structure in a reasonable way and it should not fail. We have argued throughout that the legislation should limit people's liability. At this moment, it is under common law, and in the situation you describe, you would go to court and a sentence would be passed under common law. This legislation would allow reservoir managers to say that they taken all reasonable steps and were compliant with the legislation and show the evidence for that. That may assist in limiting their liability.

**Mr Swann:** I know that it is not part of the Bill, but when will the Rivers Agency publish the reservoir inundation flood maps? Those will have a bearing.

**Mr Porter:** Going back to the floods directive, we had to have the maps for significant flood risk areas produced — the word in the legislation is "produced" — by 22 December 2013. We have done that. We are looking for an opportunity to make the river and coastal maps public. Discussions are ongoing as to whether we can publish the reservoir inundation maps at the same time.

We were very hesitant to do this before as the Bill had not been introduced. However, as the legislation is going through scrutiny, and its principles are agreed, we are slightly more comfortable. So, we are hopeful of doing so in the not-too-distant future. We are seeking a date at the moment.

**Mr Swann:** I understand the Department wanting to wait to release all the inundation maps at the same time, but the fact is that the reservoir maps are specifically for this Bill. Why are you not going ahead with producing them or releasing them now?

**Mr Porter:** We have made them available to any of the managers and anybody who wishes to see them, provided that they are known and have an interest.

**Mr Swann:** Do they have to request them from you?

**Mr Porter:** Yes. In fact, today, we have had another request for the release of another two. During the stakeholder event, we were quite happy to give a reservoir inundation map to those who admitted being an owner. We wanted to put the public release of the maps in the context of this being not just another hazard to be concerned about and that government is doing something about that hazard. That will give the public a little bit of comfort so that they will not take an adverse reaction to that.

**Mr Swann:** Once you have highlighted a hazard, such as the potential breach of a reservoir in an area, have there been any concerns? I think I raised the issue of household or business insurance.

**Mr Porter:** There should not be. The insurance industry tends to view reservoirs as low risk in the way it describes risk, provided that it gets an assurance that they are inspected, routinely maintained and that a panel engineer looks at them. The industry will take that assurance that it is a risk that it does not need to concern itself with. It is recognised that, if all the water could release, it will cause significant harm. Therefore, the design standard that reservoirs are constructed to is very high. Our issue is about routine inspection and maintenance. The real drive behind the Bill is that somebody routinely needs to have a look at them. An expert needs to come in once a year on a medium structure and twice a year on a higher-risk structure. Every 10 years, there needs to be a really good thorough look at it by an absolute professional. That gives assurance that the structure is being maintained and managed in a reasonable way. Therefore, household insurance should not be an issue in flood inundation areas.

**Mr Swann:** As regards building on flood plains or potential flood plains should a dam or reservoir breach, PPS 15 currently deals with flood risk management. The Minister of the Environment is reviewing all his planning statements. What liaison is there between the Department of the Environment and Rivers Agency about the Bill?

**Mr Porter:** It was mentioned by the researcher earlier that draft PPS 15 was out for public consultation, which finished on 10 January. There is a new FLD 5 in that. There was very close working between Rivers Agency and DOE officials in drafting the FLD 5 flood policy. There has been very close working.

**Mr Swann:** Is there a planning policy for reservoirs?

**Mr Porter:** FLD 5 is the planning policy. That is not accepted yet. PPS 15 was approved by the Executive to go to public consultation. It was subjected to public consultation, which ended on 10 January. Subsequently, responses made during that public consultation have to be considered by the Department of the Environment. There will then be a final approved version. Today, there is no FLD 5 regarding enforcement or planning policy, but there is a draft FLD 5, which we expect to be put through the public consultation process and confirmed in the not-too-distant future.

**The Chairperson:** If you have a low-risk reservoir, but, over the years, the surrounding area is built up into a population centre, will that change the definition of the reservoir to high risk, even though it has complied with all the legislation to that point?

**Mr Porter:** Yes. That is why, in FLD 5, we have included the requirement — not in the legislation, but in the planning policy — that a developer downstream has to be able to demonstrate that the hazard upstream is OK. That, then, will be a private matter between the developer and the reservoir manager. The developer will have to be able to give us assurance that the upstream hazard is OK. This will encourage a good working relationship between the two because the developer will not be able to give that assurance without getting access to the land and carrying out inspections. Therefore, if there are defects, the onus will be on the developer to come to some arrangement on those defects.

**The Chairperson:** What arrangements could a developer possibly come to? If he wants to build on a slot of land that could well become flooded through a breach in a reservoir, that would be a yes or no negotiation. Is it not unfair on the reservoir manager or owner that his destiny is not his own?

**Mr Porter:** I would put it the other way. A developer who wants to develop downstream of a low-risk reservoir will need to take on board the fact that he may well have to fix a reservoir in order to allow the development to go ahead. His planning approval will be conditional on him being able to provide that assurance. If the reservoir manager says that he does not want a development downstream and is not going to fix his reservoir, the developer will not get planning permission. The only way that the developer will get planning permission is by working with the manager.

**The Chairperson:** Let us live in the real world of planning, in which people push their luck, build and then fight it at enforcement, when enforcement has no real teeth or appetite to fight. If conditions are laid down that in order for a developer to build 20 or 30 properties he must do work to someone else's property, he may say, "OK that is dead on, I agree to that". He will then start building his houses, putting in his foundations, but does not start the work on the reservoir. How can you ever expect

enforcement to come down on him and enforce things when there have been so many breaches and failures in the past?

**Mr Porter:** I would not like to try to defend Planning.

**The Chairperson:** No, I don't think you could. *[Laughter.]*

**Mr Porter:** That is way outside my area of responsibility, but I can give you a little bit of comfort. An initial look at the designation shows that there are only 20 low-risk structures. This means that the vast majority of reservoirs already have development downstream. By looking at where those 20 are located, and given the property boom that we went through, had there been development in the lea of those reservoirs, I suspect that the applications would have already been in.

These are remote reservoirs. There is one that, when it spills, it spills into the sea and there is no development land downstream. Although it is a concern, I am not sure that it is a significant concern. There will not be lots of applications that we get that will change this designation from low to medium or high.

You may well get the situation where additional development changes a medium-risk structure to a high-risk one. However, the financial burden would not be quite so significant, because it will already have a supervising engineer and one visit per year, which will then go up to two visits per year, and it will already have the initial inspection report by the inspecting engineer. By going up to high risk, there is the requirement that the report is done every 10 years, as opposed to when called on, but the change is not so significant. I could see that being an easier position for a developer to come to an agreement on, purely because the sums of money are not as significant. In some cases, it may well not be anything. The current arrangements may be OK.

**The Chairperson:** OK, thank you for that.

**Mr Buchanan:** What will happen to orphaned reservoirs such as Camlough? A report in February 2012 estimated improvement and safety costs to be £3.4 million, an annual operational cost of £13,000 and a 10-yearly inspection cost of approximately £3,000. Who will pick up the cost for that type of work? What is the situation regarding such reservoirs?

**Mr Porter:** There are now only six reservoirs in that situation, whereby we have not been able to identify who we believe to be the owner or manager. We continue to work on that. In the legislation, we have powers, in the interests of public safety, to step in and carry out works so that we can deal with the downstream consequences. That is so that we can give assurances that these reservoirs are being reasonably managed.

I would not describe Camlough as an orphaned reservoir. We know who owns it and who is responsible for it and we are working with a number of groups. Again, to give you a little bit of comfort, the figure has come down slightly. I know that you are calling DRD and Northern Ireland Water, and they will have done some work. Those initial figures of £3.4 million did not come from a panel engineer report. That came from a water strategy report: we asked that they had a quick look at that reservoir in order to give us an indicative figure. They have since commissioned an inspection engineer, and I was at a meeting of that group at the tail end of last week, and they have a more detailed report. The figure is still scary but it is not as scary as that, and they are working through that.

In general, in the case of reservoirs that we cannot find an owner for, we have the powers to address those items in the interests of public safety, so we will carry out an inspection. That will remain as a burden and we can choose whether, when we find the owner, to seek to recover those costs or we can potentially put the cost on as a burden on the deed of that property in the longer term. Again, that is a situation that we will have to deal with on a case-by-case basis. Thankfully, there are not too many cases, because we have worked through that and are now down to six. We are still confident that we will find some of the others before the legislation is enacted.

**Mr Buchanan:** This might not be appropriate for you, but, in light of everything that is in the Reservoirs Bill, what is the Department doing about seeking to ensure that the proper funding will be in place for this type of thing? Is funding being looked at and set aside or tied into the budgets? How is that panning out?

**Mr Porter:** There are two aspects. First, I will throw this argument out because I think that it is something that you need to keep in mind as we are going through the scrutiny of the Bill: a reservoir owner or manager should be maintaining their structure today irrespective of this legislation. In the event of failure, they are responsible. The common law is *Rylands v Fletcher*, as was mentioned in the Assembly the other day. What was argued the other day was that, because of that common law responsibility, which is that we know who is responsible at the point of failure, that should drive behaviour. People should be saying that, if this fails, I will be responsible and therefore I should be inspecting and maintaining my reservoir. We have evidence that that is not the case, and that is why we are bringing forward this legislation.

This function needs regulation. People need to be required to inspect and maintain their reservoirs. However, I would then argue that, if they are responsible today, it is not because of the legislation that those big figures are there. They are responsible for that irrespective of the legislation. They should be maintaining their structure in a way that is not a danger to people downstream. Thankfully, we have had no reservoir breaches in Northern Ireland that have killed anybody, but that is not the case when you look at England, Scotland and Wales where over 350 people have died in the past 150-odd years because of reservoirs. We have been very fortunate that we have not had a breach. A prudent owner will be subject to the costs of managing the structure today. Thankfully, the owners who have not been subject to it have managed to get away with it, but those costs are not as a direct result of the legislation, it is because they own a reservoir.

The second thing to mention is our ability to bid. That is why I went through the timeline. Our difficulty is that we will not really know all the information about these structures until around July 2017, which will be the end of the CSR period. By then, or at some point along that road, we will have started to gain an understanding.

You mentioned Camlough, which is a real concern. I am genuinely not expecting to find many situations like Camlough. There may be another one like it out there that is a real problem and has big figures associated with it, but I am genuinely not expecting to find a lot of them because of our knowledge of the reservoir stock. We are not in a position to bid, and, even if we get the money, we cannot do anything in the absence of legislation anyway.

**Mr Buchanan:** Nobody has been killed by water coming out of a reservoir so far, and you are saying that it has been the responsibility of the owner to keep the reservoir in good condition and safe to date. A person on whose ground the reservoir is located may not be aware that it could be in poor condition. Therefore, this will be coming as something new to them and putting an added cost on them that they may not be able to afford. What happens if a person does not have the financial ability to upgrade the reservoir as the Bill requires?

**Mr Porter:** This was the single biggest issue raised in the public consultation, and it was a very clear concern of the Assembly. So, we have put in the provision for a grant scheme. The Minister went further in the House when she said that she was particularly concerned about third-sector or not-for-profit organisations. She gave a commitment to look at the issue in more detail to see whether she should be meeting measures in the interests of public safety. That commitment stands, and it will be a piece of work that her officials will be doing and taking to the Minister as we go through this process.

**Miss M McIlveen:** Apologies for missing part of the meeting. I hope that I do not repeat questions that others asked.

You said that you will move in where there is no identifiable owner and where it is in the interest of public safety to do so. Clause 71 addresses the Department's powers in an emergency. Under what circumstances would you enact that clause?

**Mr Porter:** This clause gives us the power to deal with the situation faced in 2007 at Ulley reservoir in England. In that instance, a slip in the downstream face was identified: part of the dam structure had started to move and float downstream. There was also a high-pressure gas main downstream, so there was potentially a very serious situation. The Environment Agency, the panel engineer and the owner had to work together to deal it. So, the powers detailed in clause 71 allow us to work in the type of situation where the consequences could be catastrophic. We would have to go in and commission assistance from an engineer or work alongside an engineer to make sure or attempt to make sure that there was no failure.

**Miss M McIlveen:** It would seem that that would be at the extreme end of the measures that you would have to take. Would that follow on from issuing notices and taking owners to court? Obviously, if there was the potential for that amount of danger, you would surely move in in advance.

**Mr Porter:** You are absolutely right. This is outlining a situation where it appears to the Department that immediate action is required. So, where that immediate action is required, it is not about what the other clauses say. You have to deal with situation in the interests of public safety. So, in that situation, we would absolutely invoke that clause and deal with it in that way, as opposed to trying to keep that responsibility on somebody else's shoulders. In that situation, we would be particularly concerned about the downstream consequence and the impact on the wider community.

**Miss M McIlveen:** Those costs would then have to be recouped from the owner at a later stage.

**Mr Porter:** Cost recovery is referred to in clauses 7 and 8.

**Miss M McIlveen:** Moving on to costs, obviously there are financial implications, and others mentioned that where grants and so on are concerned. However, are you aware of an approximate cost of employing a supervisory engineer, an inspecting engineer or a construction engineer and so on? Do you have an idea of how much that would cost the owner or manager?

**Mr Porter:** I would set aside the cost of a construction engineer. A construction engineer is a specialist for a particular role. So, that is not a routine cost. If you were going to do some works that are particular to your structure, you would employ a construction engineer. Those costs are not routinely encountered. It would, as we would describe it, be project based. So, if you were going to do something or change the reservoir into a hydroelectric scheme, it would be part and parcel of that. At the same time, if you were going to decommission or abandon your structure, you would need a construction engineer to come in to certify that those works have been done in a reasonable way. The routine costs are for the supervising engineer and the inspection engineer. We have set out a range of figures. For supervision, it is between £2,500 and £5,500 a year. For the first inspection, we have a higher figure for the inspection engineer, which is between £6,000 and £8,000. For subsequent 10-yearly inspections, it would be between £2,500 and £4,000.

Those figures come from the Environment Agency in GB. There is a difference between the first inspection and the subsequent inspection, because we recognise that, if you do not have any information about your structure, lots of inspection work will have to be done. There may need to be some ground investigation and some understanding of the catchment so that they understand how much water can come in from the upland areas. So, a larger figure is involved with that. It would be worth raising some of those questions with the engineers. That information has been derived from information that the EA has held over a period of years. The engineers will be able to give a figure for a particular structure and could say, for instance, what a company would charge for a concrete structure. That may be more useful to you when deciding whether it really is a burden or how unreasonable it may be. They will be very well able to give you a range of costs. However, it is in that range.

**Miss M McIlveen:** The owners or managers would then have to select those engineers from a list.

**Mr Porter:** From the panel.

**Miss M McIlveen:** How are engineers appointed to that list? Is it a transparent process?

**Mr Porter:** It is. Again, this is similar to an answer that I gave earlier, but I recognise that you were not in at that stage. The Institution of Civil Engineers in London maintains a reservoir committee that scrutinises applications. It does not appoint; under the 1975 Act, it gives a recommendation to the Secretary of State. Under our Bill, it will give a recommendation to the Department, and it will be a departmental appointment to the reservoir panel.

We are also recognising that engineers on the existing panels will be allowed to operate initially under this legislation. We are doing that so that no nugatory element or cost is associated with setting up a panel particular for Northern Ireland. We will be able to use those panels for the initial phases. Looking forward, we have had discussions with the reservoir panel about how we will have a geographical difference in their application. So, if a reservoir panel engineer wants to work in all areas and apply for and tick all those areas, he has to be prepared to be questioned on the different pieces

of legislation and has to be able to understand the different legislation. However, if you want to work just in Northern Ireland, you can then get on the list just for Northern Ireland, and you will be asked only about the Northern Ireland legislation. That will be the difference. However, that is for the future; it is not in the initial plan. Initially, we will take the list as existing and will recognise that under the legislation.

**The Chairperson:** Can I ask questions on flood plans, which are one of the operating requirements for the high- and medium-risk reservoirs? Who has the capacity and capability to produce that flood plan? Is that left to the reservoir owner? Could inspecting engineers produce it? How do you know that a flood plan is sufficient?

**Mr Porter:** A little bit more detail is required on that, because we say "by regulation". It is one of the factors that we will bring forward. In appendix D of the public consultation document that was put out in March 2012, we laid out information that may be included in the on-site plan. That included elements such as the location, the responsible person, the use and type of structure, the named company and the address and phone number of supervising engineers. That is routine information. We are not talking about flood inundation maps or consequence decisions; we are dealing with operational and routine issues. I am not as concerned about the on-site flood plans and the requirement for them. It starts to become more complex when you try to develop those into off-site flood plans and try to say, "The time of inundation to a particular point will be x and our reaction will be something else". We do not have that in our mind at this time. We will bring forward an on-site plan that is operational, and it should be within the gift of most reservoir managers, with some assistance from their engineer, to draw it up at, we suspect, a relatively modest cost.

**The Chairperson:** That brings me on to another point about secondary legislation and the delegated powers. It looks as though you could go into up to 26 areas. Are we all being blindsided? Are you asking the Assembly to pass legislation that you could change dramatically in all sorts of directions?

**Mr Porter:** Certainly not. We included a lot of the areas that we have discussed — the flood plan is a good example — in the public consultation, and we asked questions about the type of forms and about whether it was reasonable. We have been laying out our stall from day one. We do not intend to do anything dramatically different from what we said, and we have tried to keep as many of the significant issues in primary legislation as we could. Areas that have the potential to change can be dealt with that through secondary legislation.

**The Chairperson:** Can I take you to clause 4, which is about further provisions for controlled reservoirs? Clause 4(1) enables the Department to make provision, by order, for a different volume of water to be substituted for the volume threshold of a controlled reservoir. Is that about one specific reservoir, or is it a 10,000 cubic metre threshold for all reservoirs?

**Mr Porter:** No, that is for all. That is just trying to give us some room for manoeuvre in the legislation so that, in the event of a change, we do not have to try to revisit the primary legislation and that we have the ability to make some minor adjustments. Again, it is one of those provisions that is there to future-proof the legislation. There are quite a few of those. We do not envisage having to use that at this minute in time.

**The Chairperson:** How will that then be acted out? Will that come by negative or affirmative resolution?

**Mr Brazier:** It will be draft affirmative, Chair. As was alluded to, 37 of the clauses will require regulations, 13 of which are draft affirmative and 24 of which are negative. That said, we expect to share our thinking on the negative resolutions with you, obviously before those are laid. We will explain our thinking around all that. The one that you are referring to is draft affirmative, and the clause on flood plans is also draft affirmative. So, those are two particular resolutions that we will definitely be talking to you about, but we will be talking to you about them all.

**The Chairperson:** Clause 2(3) enables the Department, by regulations, to provide that a smaller reservoir is to be subject to the Bill in the same way as a controlled reservoir. What do you have in mind there? What is concerning you that means that you have that clause?

**Mr Porter:** We are not concerned about any particular structure. Again, at this minute in time, all that we are doing is making sure that if, as we go forward, we find something that we are particularly



concerned about, we do not have a problem bringing it forward. However, at this minute in time, we have identified no structures that we plan to use that regulation for. That one refers to a specific structure, so that will not be a clause that we will be able to use to change the volume; that is somewhere different. This one is a particular structure for a particular reason.

**The Chairperson:** If you were to pick a puddle of water, how would the owner of that puddle be able to appeal that? If they feel aggrieved, what mechanisms are there for them?

**Mr Porter:** I cannot think of any puddle of water that we plan to do this for. All that it is is the power to do that by regulation. At this time, all that we are doing is future-proofing the legislation to give us the ability to do that in case there is something in the middle of a highly populated area that is on the point of failure and we have to step in and do something about it informally. That, therefore, requires the owner to bring it up just because of the consequence. However, there are no examples that I can think of that we will be doing that for.

**The Chairperson:** So, if you were to bring forward secondary legislation on this, would there be an appeals mechanism along with that?

**Mr Porter:** Yes.

**The Chairperson:** OK. With regard to the overall dispute-and-appeals mechanism, you have an appeals mechanism that would be allowed for stop notices. So, if an owner does something that you want them to stop doing — you would want them to stop immediately, I imagine — how can you have an appeals mechanism? Although that appeals mechanism carries on, does the behaviour and activity continue while they are going through an appeals mechanism? Sorry, I am referring to clause 73.

**Mr Porter:** Can we come back to you on that?

**The Chairperson:** That is fine; there is no problem with that whatsoever. The question is about the practical outworkings of the appeals. The stop notices are only one aspect of appeals that I have picked out. Obviously, you want someone to stop, because there is fear. So, if they then appeal that, can they continue the behaviour? I want to clarify that, and we can certainly take that in writing; there is no problem there.

There are other reviews, decisions and appeals mechanisms in the Bill. Again, are you confident that they are all open, transparent and conservative in cost? Are there any other best practice methods that could be used that you are not using?

**Mr Porter:** We have looked at having an informal system, and, in the event that that does not work, there are appeals. As I described, a group of people in Rivers Agency make a decision on a designation. We will have that as an initial designation, and, if an owner wishes to, they can then provide other information. Again, that would be done on a no-cost basis. That is informal, and it is only then when decisions are not accepted that people would have the ability to take those down to a formal process. So, both those are built in to that.

We looked at various options for the appeal of a decision. One of the options that we had was to refer to the Institution of Civil Engineers, because we suspect that most of the appeals will be of a technical nature. For instance, if we look at comparable legislation under the Drainage Order and schedule 6, we see that, if you are not content with the Department's decision under that schedule, you can ask for the Institution of Civil Engineers to appoint an adjudicator who will hear the case. We looked at that as one of the possibles. We discounted it for the very reason that you gave, which was that, by doing that, we would not be able to give a reasonable scale of costs up front. However, we could, through the Water Commissioners, because they have a published and agreed scale of costs. However, the Institution of Civil Engineers has a cost for appointing the person to hear the appeal. After that, it is whatever it costs to hear the appeal. Our concern with that was that a person could be put off, because they may not be sure about what the appeal would cost, and that could be a barrier to them taking a very reasonable appeal. So, we felt that the water panel was the better approach, because it gives some cost certainty.

**The Chairperson:** I think that it was me who asked for a comparison of the methodology of the risk assessment in England, Scotland and Wales. Can we also have the differential in the requirements for the operation, the assessments and the yearly ongoing burden in England, Scotland and Wales?

**Mr Brazier:** Do you mean the inspection regime, Chair?

**The Chairperson:** Yes, can we have the operating and mandatory requirements for the owners?

One thing that concerns me is the cost. You have been asked about it, and you have given some rationale. Although you want the Assembly to pass the Bill, no one knows how much it is going to cost the industry, the private sector, the public sector or the ratepayer, if it will be done by NI Water. Indeed, if there is a grant scheme, no one knows how much will be needed in that pot. You have an explanatory and financial memorandum, but I can see only three points in that that are related to costs. However, the Reservoirs (Scotland) Act has a supplementary financial memorandum, which is additional. How come we cannot produce a supplementary financial memorandum? How come DARD or Rivers Agency cannot produce a separate piece of information?

**Mr Porter:** We can certainly look at that to see whether we can provide additional information. The issue, however, will be how robust that is. Scotland has had regulations since 1930, so it knows the number of reservoirs that it is dealing with, it knows the size of them, and it knows that they have been inspected and maintained during that period.

Scotland is changing the responsibility from local councils to the Scottish Environment Protection Agency (SEPA). It is changing the threshold and clarifying some of the responsibilities, but it is not introducing regulation from scratch. Our difficulty is that, when we ask how good or bad our reservoir stock is, we can get good assurance on certain reservoirs but very poor assurance on others. So, the information is very difficult to get together. It would be based on lots and lots of assumptions that may or may not prove to be correct. So, it is a problem that we recognise.

**The Chairperson:** The Scottish Government commissioned an independent financial report from Atkins Ltd in August 2010. Have the Rivers Agency or DARD done that?

**Mr Porter:** No, we have not. Again, because they know what reservoir stock they are dealing with, they have that information. They are taking that information based on inspection reports, so they know the condition of their structures. Therefore, they can identify what works are needed in the interests of public safety and who is unable to do those works. We do not have that first piece of information, which is the initial inspection report, to then be able to better inform it. I would again try to give a little bit of comfort on this. You mentioned a concern about Departments and Northern Ireland Water in particular. Northern Ireland Water manages its structures in the spirit of the 1975 legislation. Its own engineers and a supervising engineer carry out routine inspections, and they have 10-year panel engineer reports, as well as a programme of works that comes out of those. So, I would not be concerned about the costs for that.

I can give you the same assurance for the structures that we look after. We have a routine inspection by our own engineers, as well as a supervising engineer and an inspection engineer, and works are being done. Going forward, those costs are not real, because we are currently dealing with that, and we manage it between Northern Ireland Water and ourselves. We can give you that same assurance about many other public bodies, as well as some of the councils. It boils down to that last third, which are the private sector facilities, or the unknown ones or the third sector, for which it is going to be very difficult to quantify with any degree of certainty what the costs will really be.

**The Chairperson:** Even with regard to the grant scheme that may or may not be brought in, at least the Scottish Government have identified the potential costs. In their memorandum, they state that:

*"The potential cost to the public purse for an individual grant could, therefore, range from £1,000 to £1.2 million if the grant covered the full cost of adaptation."*

That is in that memorandum, so at least the Scottish Parliament can make a judgement as they go forward with their Act. However, the Northern Ireland Assembly cannot make that judgement.

**Mr Porter:** You are correct about that at this minute in time. However, the Minister gave a commitment to look at the third sector in particular in more detail to see whether she can meet the

costs of those matters in the interest of public safety. So, for her to take that decision, she is going to require some of this information. That means that we are going to have to do some work on this to try to quantify it in some way.

**The Chairperson:** Are you able to do that work in the time that is available to this Committee to scrutinise the Bill?

**Mr Porter:** We can certainly attempt to do some of that work. Again, I would add a caveat about some of the assumptions that we are going to have to make. We are not going to be able, and properly we should not be able, to commission an initial inspection on the structures, because that responsibility rests with the owner. The legislation makes it clear that that responsibility does not shift. I would not like to be in a position where I would undermine that fundamental point, which is that the reservoir manager is responsible for the structure. We are certainly going to have to think about how we can quantify the scale of any grant scheme for the Minister to take an informed decision.

**The Chairperson:** OK.

**Mr McMullan:** Most of my questions have been answered. Talking of the law, is there any difference between industrial law and common law? Will everybody come under the same law? You mentioned the possibility of court cases, so are we talking about the County Court or the High Court? There is no mention of it in this Bill. I know that it was mentioned in the Marine Bill that went through the Assembly. Is there a third-party appeal process? Some of these people could end up being caught in a court case. I am talking about the likes of councils, which can afford to go to court. However, other people, such as managers cannot, and it would leave a very unfair situation.

**Mr Brazier:** The Bill refers to summary conviction and then to conviction on indictment. My understanding is that summary convictions are dealt with by the Magistrates' Court and that convictions on indictment are dealt with in the High Court. That is the language that the Bill uses. So, those are the jurisdictions that will consider those convictions.

As I said, we would hope never to have to use these penalties. They are there as a deterrent. This is about trying to help people to understand what their responsibilities are, to encourage them to comply with their responsibilities and to give them help and support in doing so where they have difficulties. The last thing that we want to do is take anyone to court. We do not want to have to do that. There is a raft of other things, such as civil convictions and fixed and variable monetary penalties and that kind of thing, but we do not want to go down that road. If we have to, however, the Bill allows us to do that.

**Mr McMullan:** When you talk about downstream danger to the public, how far away are we talking about? They could be up the side of a mountain, miles away, or just up the road. What is the difference?

**Mr Porter:** It will vary according to reservoir, topography and shape. However, we have flood inundation maps, as was mentioned, so we can determine where that water would go in the event of a breach of that structure. Those maps were made just to give the high-level figure; they show only a flood outline, not depth or velocity. The next bit of work that our mapping and modelling teams will undertake will be to develop that flood inundation map to show depth and velocity. That will refine that work, because we need that information to take the decisions about high and medium risk. As I explained, depth and velocity — deep water flowing fast — is what causes the harm. We have flood inundation maps, and some of them go quite a distance. Certainly, when dealing with some of the larger structures, you see that the water will go some distance.

**Mr McMullan:** My last question is this: can the planning authority use any of the Bill as a stick to beat the owner with? If a shrewd developer came in, could he use the planning laws to get round a manager or owner to do something with a reservoir that could endanger his development proposals? The only person who is safe in this is the Crown.

**Mr Porter:** I think that it applies to the Crown as well —

**Mr McMullan:** No. Not as much to the Crown; it does not apply that much to the Crown. Is there any safeguard in the Bill for the ordinary manager or owner?

**Mr Porter:** The safeguard is in planning policy. It was identified in PPS 15 that that was one of the gaps. We were going to bring forward legislation to require owners to do things, but there was no link-up with planning policy. That is the gap that FLD 5 closes. As I said, that was subject to public consultation, and it will be confirmed in the not too distant future, taking on board the comments from the public consultation. That planning policy is what gives that manager or owner the safeguard.

**Mr McMullan:** What happens in the case where a council owns one of the reservoirs but the planning function has now been handed to council? Does the council just declare an interest and carry on? Surely there would be a conflict of interest there. Is there nothing in the Bill to safeguard against that?

**Mr Porter:** One good thing is that we have planning policy statements that assist decision-makers. Such a council would have to demonstrate how it is compliant with planning policy statements. It would be dealt with in the same way that central government own reservoirs and are the planning authority today. I suspect that it is no different; it will just be under a different authority.

**The Chairperson:** Can I go back a bit? I promise that this is my last question. I think that it was Tom who brought up the example of Camlough. You referred to knowing who the owners are. I know that we are in public session, but we are led to believe that Camlough was owned by a trustee group, the members of which may all be deceased.

**Mr Porter:** That is correct. Camlough was brought forward by a piece of legislation. Off the top of my head, that happened in 1871, and it enabled that reservoir to be constructed and enabled the formation of the Water Commissioners. We know who the last Water Commissioners were, so the people who are responsible for that reservoir today are the Water Commissioners. The piece of legislation that puts them in place still exists. Parts of that 1871 legislation have been repealed, but the bit relating to the appointment of a Water Commissioner has not. So, technically, it is the Water Commissioners, but there is no person who sits in or holds that position. That is something that we have worked through with Northern Ireland Water and Newry and Mourne District Council, because both those organisations have an interest in Camlough lake going forward.

We have been having a discussion about the best option for everybody collectively and about what the options are, given that that post — the Water Commissioner's post — does not have an individual in it who can take a decision. The barrier to any person putting their hand up for that position is the £3.5 million liability that they will incur. That liability is down a wee bit from that figure now, but it is a particularly complex situation. I am absolutely sure that Northern Ireland Water, Newry and Mourne and DRD will want to talk about it. However, it has been a very good test case for us in trying, informally, to understand the types of issues that we will face when we are the reservoir authority for Northern Ireland.

**The Chairperson:** I am happy enough. Members, do you have any more questions to ask? This is your last chance to scrutinise the Rivers Agency in this period. OK, the members are content. Thank you very much, David and Kieran, for your time and for your marathon session.

**Mr Porter:** Thank you.