



## **Committee for Agriculture and Rural Development**

# **OFFICIAL REPORT (Hansard)**

**Reservoirs Bill: DARD Pre-introductory Briefing**

**5 November 2013**

# NORTHERN IRELAND ASSEMBLY

## Committee for Agriculture and Rural Development

### Reservoirs Bill: DARD Pre-introductory Briefing

5 November 2013

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

Mr Paul Frew (Chairperson)  
Mr Joe Byrne (Deputy Chairperson)  
Mrs Jo-Anne Dobson  
Mr William Irwin  
Mr Trevor Lunn  
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 David Porter, director of development, and Kieran Brazier, head of Bill team. I hope that I have got that right. You are very welcome, as always. Following the briefing, obviously you will take questions from members. Members, I ask you to note that the staff are preparing a work programme for the Committee on the Bill, and they will bring it for approval shortly. However, it would appear that the bulk of the work will probably be post Christmas. Again, we will probably hear from David on that.

Without further ado, David, are you leading off on this? Thank you very much.

**Mr David Porter (Department of Agriculture and Rural Development):** Thank you for the opportunity to talk to the Committee today. I am conscious that some people have heard me speak about this before, but others have not. Therefore, I propose to give you a very brief history of reservoirs and how we have got to today with regard to regulation. I will try to keep that as short as I possibly can, because I am conscious that people have heard that before. I will then go quickly through the policy that has been approved by the Executive and give you a very quick overview of how that policy is reflected in the Bill. At that stage, I will be happy enough to take questions.

To understand the reservoirs that we have in Northern Ireland, we have to go back to the industrial revolution and the 18th and 19th century, when an awful lot of reservoirs were being constructed. In essence, at that stage, we see the industrial revolution and the need for controllable power. Waterwheels were put into rivers to harness that power, but the problem is that, when you put it straight into a river, you are completely dependent on the reaction of the river. Therefore, to gain

control of that, engineers decided to impound, or stop, that water and to take control of it and release it when power was needed for the mill.

What became very clear very early in the development of reservoirs was that the person and the companies that were capable of building the mill were not necessarily capable of building the water-retaining structure. That was demonstrated very clearly by a number of failures. In 1852, the Bilberry dam failed and caused the loss of 81 lives. In 1864, a reservoir called Dale Dyke, just outside Sheffield, failed and 245 lives were lost.

Straight after that, in 1865, a committee — I suspect not dissimilar to this, but in Westminster — said that, by an Act of Parliament, frequent, sufficient and regular inspections of dams should be brought forward. So that was in 1865. Interestingly, nothing happened for 60 years, and it took another series of failures and deaths for the first piece of legislation to be brought on to the statute books. In 1925, there were two failures: one in Wales, where 16 lives were lost; and a second in Scotland, where five lives were lost. As a result of those two failures, the previous recommendation from the Select Committee was picked up. That was the reason why, in 1930, we had the first piece of legislation which regulated the safety of reservoirs and required a whole system of regulation.

That was the regulatory and legislative picture until 1975, and there was a fairly significant change in the legislation at that stage. The 1975 legislation is the underpinning legislation to the way in which reservoirs are regulated in England, Scotland and Wales today. There have been many changes over that time, and they are going through a significant period of change at the minute with amending legislation, but the fundamental pillars that that legislation brought in still stand, and that is how reservoirs are regulated in England, Scotland and Wales. Interestingly, the 1975 Act specifically excludes Northern Ireland. It says in the Act that the powers will not extend to Northern Ireland. So, the picture in Northern Ireland is that we do not have regulation of reservoirs. There are a number of pieces of legislation that mention reservoirs, such as the Water and Sewerage Services (Northern Ireland) Order 2006 and the Drainage (Northern Ireland) Order 1973, but there are no regulations requiring reservoirs to be maintained to a particular standard.

That is really the legislative background and a little bit about why we have some reservoirs. This really came to attention because of a piece of European legislation. The Department of Agriculture and Rural Development (DARD) is the competent authority for the EU floods directive, which required us to look at all the potential flood risks in order to identify significant flood risk areas. That is the recent trigger for our attention on reservoirs.

In carrying out the preliminary flood risk assessment, we looked at the obvious things — the rivers, the sea, surface water. We also took the opportunity to identify the fact that there is a flood risk associated with reservoirs or impounding reservoirs. That gave us the opportunity to raise the fact that these are unregulated. Therefore, we could not give assurance to the public or to elected representatives that they are being maintained to a reasonable standard. On the basis of that, we were able to do some additional work to try to put into terms the potential impact that these structures have. At that stage, we identified 156 structures, and if those failed, they would impact on 66,000 people. That piece of information was sufficient for us to take that to the Minister and say, "This is the size of the potential hazard that we face". That was sufficient to take it to the Executive, who agreed that it was an issue that should be addressed. That is the start of the Northern Ireland Reservoirs Bill that we have in front of us.

The first thing that we had to do was develop the policy, and you will see that on your briefing note in a series of bullet points at the bottom of the page. It has been subject to public consultation, and we received a number of comments on that. I will give you some feedback on that, but it did not largely change the policy, except in one particular area which I will draw your attention to.

The policy that we have agreed to bring forward is that reservoirs will be regulated, and it is reservoirs of a certain size, so we are proposing that it will be those with a capacity greater than 10,000 cubic metres. So, these are quite large structures — roughly the size of four Olympic swimming pools. They are large features. They have to be impounded reservoirs or above the natural ground. For instance, a natural lake is not a reservoir, even though it holds water, the reason being is that there is nothing to fail to release that water; the water is just sitting naturally in the ground. When we come along and raise that water above the natural ground by building something, that is the vulnerable bit. The bit that we build is the vulnerable bit. If it fails, it releases the water that is held above the natural ground.

We intend to bring forward a risk-based approach for reservoirs. We recognise that one size does not fit all. There are different sizes of reservoirs, and there are different potential impacts. Therefore, we have to have a range of ways of dealing with things. That was the one area that changed through public consultation. Initially, we put out basically an on/off switch. A reservoir was either going to be high impact or low impact. We put that out to public consultation, and it was clear from that consultation that there was a wider range, and there are different reservoirs with different impacts. Therefore, we have now proposed high, medium and low. That was a reaction to the public consultation. Each controlled reservoir will be assigned a designation of high, medium or low. That is taking into account a whole range of impacts, including human health, the environment, cultural heritage and economic activity. Those four criteria are a direct lift from the EU floods directive, because we wanted to ensure that the new piece of legislation was compliant with the EU legislation. Therefore, we have just taken those directly out of that legislation and put them into the Reservoirs Bill.

We also want each controlled reservoir to be subject to proportionate supervision. So, not only are we recognising that there is a difference in their impact, with high, medium and low, but, because we recognise that, there will be different inspection regimes required under the legislation. Those that are high impact will have a high degree of requirement placed on them, those that are medium impact will have a lesser requirement, and those that are low impact will have the minimum amount of requirement to comply with the legislation.

We also tested how the public and the owners of the reservoirs would manage their structures. It was very clear that the structures are very complex and that people would need professional help with that. We looked at the way that England, Scotland and Wales carry out that function, and they use what is called the panel engineer system, so a professional engineer who is approved by the Institution of Civil Engineers is employed by the owner or manager of the reservoir to carry out inspections, whether that is on an annual basis, and we call that a supervisory engineer, or on a 10-year basis, and we call that an inspection engineer. We have those two different types of engineers, and that ability or competence will be provided by that panel of engineers recommended by the Institution of Civil Engineers and approved by the Department.

We have a few other bits and pieces towards the end of the Bill. There are some appeals and dispute resolutions and some enforcement. You will see that in all legislation. We have been very clear that while we have to have those in the legislation, we want to keep those to a minimum. We also want to encourage an informal discussion so that the enforcement is the stick. We do not want to really enforce; we want to have a dialogue with reservoir managers, and we want them to understand what the potential impacts will be. We want them to understand their responsibilities in respect of their structure and, therefore, to be compliant. We want the enforcement procedures so that we can deal with any non-compliance, but we hope that that will be a last resort. Therefore, we have built in a formal and informal process in the legislation as well.

We have also included a number of miscellaneous provisions. The one that you will be most interested in is the emergency powers. In the interests of public safety, government is taking the power to step in. We can do that in one of two ways. First, in respect of non-compliance, where we are concerned about a reservoir breaching and, in the interests of public safety, works need to be done immediately, we have the powers to do that. The second case is where we cannot identify the owner or manager. When they were bringing forward the UK legislation, they used the term "orphaned reservoirs" when they could not find who the owner was. So, we are also taking the powers in that case. Where we identify an issue, in the interests of public safety, we will have the powers to step in.

Hopefully, that gives you an insight into why we have reservoirs, the potential impact of 156 reservoirs on 66,000 people, and the main policies that underpin the legislation. I think I will pause at that point and take any questions.

**The Chairperson:** Thank you very much, David, for your presentation. I remind members that this is the start of what could be a very long process with regard to scrutiny of this Bill and the clauses within, if and when it gets to the Committee Stage. Before that, of course, it has to go through all the other stages.

Some of these questions may have been asked before, David, in your time here at Committee and during our visit to the reservoir to Newtowndars, when we saw its potential impact and proximity to households. My first question goes right back to clause 1, which is the best place to start, and is about the definition and measurement of a reservoir. Clause 1 states that a controlled reservoir is:

*"capable of holding 10,000 cubic metres".*

I suppose that many reservoirs, even depending on the weather, consistently hold a lot less. Is it specifically about the cubic capacity of the reservoir, or if, say, someone could prove that over the past 10, 15, 20 or 30 years that the volume was consistently lower, are they omitted from the legislation? Is there a dividing line?

**Mr Porter:** We had to set some threshold, and 10,000 cubic metres is the threshold that England, Scotland and Wales use. We were also advised by the Institution of Civil Engineers that that was the volume that could cause harm, so we had to pick a threshold. We will accept that some reservoirs hold slightly less than that or, probably more importantly, could be made to hold slightly less. I encourage any owner of a reservoir whose volume was calculated at 10,000 cubic metres to take a long look at what they use their structure for and whether they can modify their structure so that it need not necessarily be compliant with the legislation. For those right on the 10,000, I think that would be a very sensible thing to go and do, because if you can avoid the burden of the Bill by putting in some works to reduce the capacity, that would actually be a very good idea.

We have taken the power in the Bill to produce regulations that explain how that measurement will be made, and also the appeal mechanism. We have also taken the power in clause 4 to change that volume. We are going for 10,000 at this stage, but if we find that there are problems with smaller reservoirs peculiar to Northern Ireland, we will also have the powers to do that.

**The Chairperson:** The threshold that you use is 10,000 cubic metres. I think that Scotland has reduced it from 25,000 to 10,000 cubic metres.

**Mr Porter:** Yes.

**The Chairperson:** Are we simply just borrowing their definition and thresholds, or is there real scientific evidence to say that that is the volume that can do sufficient damage? Why not set it at 15,000?

**Mr Porter:** You could pick any number of thresholds between 25,000 and 10,000. Just to be clear, the current legislation in Scotland is up to 25,000. Their new legislation takes it down to 10,000. Scotland are still working under the old 1975 Act. The new Reservoirs (Scotland) Act 2011 is on the statute books, but they have not commenced it. At the point that they commence it, that removes the 1975 Act from Scotland and it will be just the 2011 Act, but they have not commenced it at this minute in time. They are working through that. They are definitely going down to 10,000 cubic metres.

Wales, under amended legislation, is definitely going down to 10,000. England has the legislation to go down to 10,000, but it is 25,000 at this minute in time. However, the exact question that you have asked is being asked in England: why are we moving from 25,000 to 10,000?

We did not set the 10,000 cubic metres threshold blindly. We asked the Institution of Civil Engineers for advice, and they told us that that was the volume that they considered caused harm. There is also some evidence that structures between the 10,000 and 25,000 have failed. In fact, one of the examples in 1925 was less than 25,000, but there is no absolute scientific reason or numerical reason to say that it is 10,000, 11,000 or 12,000. There is an argument for and against all those levels. However, we feel that 10,000 is reasonable.

Also, to give you a little bit of comfort, the change from 25,000 down to 10,000 affects 19 reservoirs in Northern Ireland. Therefore, it is an additional burden that is worth doing, as opposed to bringing in 25,000 and then, at some point later in the process, taking it down to 10,000.

**The Chairperson:** To look at the impact of the Bill on both the public sector reservoirs and those in the private sector, have you any idea — I am sure that you have, because you have done the research on it, and you talked about 19 reservoirs between the 25,000 and 10,000 mark — or indication as to how many of those 19 reservoirs are public as opposed to private?

**Mr Porter:** The majority of those are still in the public sector. There is a number of smaller reservoirs: not all of them, but the majority of them, are in the public sector. The impact of that, particularly if they are within Northern Ireland Water, in terms of the cost that would be associated with that, is that Northern Ireland Water already manages its structures in the spirit of the 1975 Act. Therefore, when this legislation comes in, it will formalise a number of things. It will mean a few administrative changes

but, with regard to carrying out capital works to the structures, I do not see that there will be a need for capital works because it is managing in the spirit of the 1975 Act. The reason for that is because it is a public body and it wants to be able to demonstrate that it understands the hazard that a reservoir can cause. The easiest way to demonstrate that you are managing your structure in an appropriate way is to take the standard applied elsewhere and apply it here, even though the legislation does not apply.

**The Chairperson:** Yes. This is my last question, and then I will put it out to members. Of the 151 reservoirs, I think, that fall within the legislation, can you give us — again, this is similar to my previous question — a spectrum of where the private versus public reservoirs sit in that spectrum? Is it predominantly smaller reservoirs for the private sector?

**Mr Porter:** It is not exclusively the smaller reservoirs. There are a whole range. The figure of 156 was the figure that we came up with under the EU floods directive on the preliminary or scoping work. As we went further down the process, we refined that and, because of the definition, a number actually fell off. Therefore, that is where the figure of 151 came from, just in case anybody wonders why there is a difference between the number that I gave and the number that is in your pack. Of the 151 reservoirs, we reckon that 95 are high risk; 36, at this stage, are medium risk; and 20 are low risk. I must stress that that is just our initial desktop sift just to try to understand what the various bands within the legislation would be. Of those 151 reservoirs, 76 are in the public sector; nine are in the third sector, ie non-profit-making; 59 are private; and we still have seven that are currently unknown. There is a whole range there.

**The Chairperson:** OK. Members, as we are dealing with legislation, I will not put a limit on questions or time.

**Mrs Dobson:** David, thank you very much for your presentation. I read through it in detail, but I apologise for this if it is contained in it, and I missed it. Can you give an indication of how much extra the Bill will cost to implement with regard to extra staff and resources?

**Mr Porter:** Under Budget 2010, we bid for this work, and we were given £200,000 for the comprehensive spending review (CSR) period. That £200,000 covers our Bill team costs and any Departmental Solicitor's Office (DSO) and legal advice that we have to get. The cost of getting that is a recurrent £200,000. When the Bill is implemented, we are aiming for a not dissimilar figure. We think that roughly the same size of team will be required to enforce, and we think that, looking forward, the departmental cost of staff time will be about £200,000. That is a recurring cost.

**Mrs Dobson:** Of the same figure.

**Mr Porter:** Yes.

**Mrs Dobson:** OK. Can you give a commitment that you will work alongside all reservoir owners to ensure that they are fully informed about the Bill? I was particularly concerned when you said that there are 59 in private ownership. Are you concerned that, rather than face thousands of pounds of expense in trying to keep up with the legislation, many of them will opt to drain the reservoir? Is there an issue with that?

**Mr Porter:** We have been very conscious that this is a new requirement, and, therefore, to date, we have gone out of our way to have local engagements with people. We had three local meetings at the policy development stage. We have written to all the reservoir owners that we can identify, and we have also gone out and spoken to a lot of them, because they need assistance to understand, first, what they own and, secondly, the implications of this. That will not change. We will continue to use that approach. We want to help people to understand this so that it does not come as a shock to them.

We were very up front with people during our stakeholder engagement about the potential for drawing down reservoirs. I appealed very strongly for people not to take any snap decisions. In a lot of cases, the requirements of the Bill will just mean routine maintenance. For instance, if you have a clay core — that means that it is covered in grass — routine maintenance means cutting the grass and keeping an eye on water levels, and that might not be as onerous as some people might think. I encourage them to get some professional advice and get one of the panel engineers in to look at their structure and to give them some advice about the likely implications of the Bill. That might give some owners

some comfort, and I know that some people did that. We also put an invite out to the Institution of Civil Engineers, and it did presentations at the events. On the fringes of those events, I saw the engineers who had come to do the presentation on behalf of the institution also engaging with individual people, and I know that some of them have got advice. So, we have done all that we possibly could to try to get people to understand the implications of this Bill, and we are very keen to continue that. If you hear about people who are concerned about that and want to talk to us, please point them in our direction.

**Mrs Dobson:** There are concerns out there, and the danger is that they do not know how much it will cost and that they will not be able to afford to maintain it. I have heard it said that you should maybe send out engineers first to give them an assessment of it, rather than have this uncertainty about the size of the bill to repair it to fit in with the legislation. That is a very real concern out there.

**Mr Porter:** On your final point, we are happy enough to send out an engineer informally to talk about the implications of the Bill. We need to be very clear that the responsibility for the hazard — that big body of water that could potentially spill and cause harm downstream — under common law rests with the owner. We are bringing in legislation to regulate that and to make it very clear that that is their responsibility, not just in common law but on the statute book. We are not changing that responsibility, and we are not saying that government will now take that responsibility. The responsibility for that will still rest with the owner, and we need to be very clear about that. We are absolutely happy to go out and give informal advice, but some of that informal advice is that you need to employ an engineer directly, because, informally, we see problems and you might need some help to understand this.

**Mrs Dobson:** It is just the fear of the costs.

**Mr Porter:** Yes, absolutely.

**Mr Byrne:** I welcome the presentation by David and Kieran. In relation to the water flooding safety aspect, there is an issue of civic amenity that reservoirs are used for. The big issue is supply of and demand for water. With our existing reservoir capacity, what is the demand for water usage relative to the supply capacity?

**Mr Porter:** We have not addressed that issue because that is the responsibility of Northern Ireland Water and the Department for Regional Development (DRD). We have engaged with Northern Ireland Water in developing this Bill, and I know that it has more reservoirs than it needs in Northern Ireland. We know that through the development of this legislation because Northern Ireland water is attempting to sell 17 reservoirs, and we have had long discussions about what the potential impact would be. From talking to colleagues in Northern Ireland Water, we know that, if it plans to sell off 17, it must have assured itself that the rest of its stock has sufficient water to supply Northern Ireland.

**Mr Byrne:** That begs this question: if it wants to sell some of them, does that mean that it believes that those reservoirs need too much capital investment or are in the wrong locations? What is the rationale?

**Mr Porter:** Again, that is a matter for Northern Ireland Water and for DRD. However, from our engagement with the Bill and our discussions with them, the way that water is supplied has changed. Northern Ireland now has, almost, a ring main so that it supplies water from different places. Rather than small local reservoirs, there is now a much more developed network. A lot of that relates to water quality, so it is more beneficial to move good-quality water than to treat poor-quality water locally from a reservoir. That, again, is something that Northern Ireland Water has taken into account in how it manages its reservoir stock.

**Mr Byrne:** Finally, does Northern Ireland Water have a contractual arrangement for supply from private reservoirs, and who puts in the capital investment, if it is needed?

**Mr Porter:** All 48 reservoirs that Northern Ireland Water own and manage are in its asset base. It may have arrangements on some of the other structures around Northern Ireland, but we are not aware of such arrangements. We know that Northern Ireland Water has 48 that it manages and owns.

**Mr Swann:** Thanks, David. What engagement have you had to date with the 10 councils that will become reservoir managers, or is this going to be sprung on them?

**Mr Porter:** All the reservoir managers that we could identify were written to and invited to the stakeholder events that we had. A number of councils came along. A number of councils also asked us to come and discuss this with them in closed session, and we were content to go along with any requests that we got. As I understand it, all 10 councils are aware, or somebody within the organisation is aware, because we have been dealing with a number of issues of concern that we have identified.

**Mr Swann:** How many of the 10 have actively engaged with you? It is all right that somebody in a council knows that this is happening, but how many are prepared to take on the responsibility?

**Mr Porter:** In such cases, they have that responsibility today —

**Mr Swann:** But how many of them have actively engaged with you? That is what I want to know.

**Mr Porter:** I would need to double-check the figure, but it is certainly the majority of them. Having been at all the stakeholder events and from talking to people, I know that. The problem is that I talked to so many people during those events that I cannot give you an absolute figure, but I am happy to get it double-checked and give you the actual figure.

**Mr Swann:** It is just to make sure that they are aware of and prepared for what is coming.

**The Chairperson:** On that question, which councils own the most? Do one or two stand out? I ask because we could seek evidence from them.

**Mr Porter:** Belfast City Council is probably responsible for most of the private reservoirs, and we have engaged with it because — again, I can say this because we are in closed session — we had an issue where water was coming out of a reservoir, and that certainly got Belfast City Council's attention. We got very engaged with the council and, because of that, we were able to take it through its responsibilities, and we know that it is involved. Craigavon lakes are a potential reservoir. As further examples, Newry and Mourne certainly have an interest in Camlough, and Dungannon council is responsible for Dungannon Park lake. We have engaged with all those organisations. I suspect that, when we actually go through the paperwork, we will probably see that we have engaged with them all. We can certainly provide you with a list of the district councils that are owners, if that would help.

**Mr Swann:** The 10.

**Mr McMullan:** Thank you for your presentation. I have just a few questions. The first thing that I want to ask is this: how much can you get on the grant scheme?

**Mr Porter:** We ensured that we had the power in the Bill to bring forward a grant scheme. At the minute, I am bringing forward primary legislation. We need to make sure that we cover all the options that are required. The decision to actually bring forward a grant scheme will come in after we have the Bill. So, we have the power to bring forward a grant scheme to assist private owners, but the decision will be made by a future Executive, future Minister and in a future CSR period because, given the timing, this will be in the next Budget period.

**Mr McMullan:** When you say "private owners", is it will be down to whoever brings the scheme in to decide whether they extend that to reservoirs in public ownership so that councils can avail themselves of a grant?

**Mr Porter:** It would be, yes.

**Mr McMullan:** Owners of some of the reservoirs have charitable status: 4% of them. Charity laws differ slightly in some cases from civil law. Have you factored that in, to make sure that they are under the umbrella of civil law along with everybody else and not sitting outside that, covered by charity laws?

**Mr Porter:** Yes. We asked that question. That was one element that was discussed in writing with a charity as part of the formal public consultation. They wanted to be excluded specifically in the Bill. We did not accept that they should be excluded specifically in the Bill, because the water and the

hazard do not recognise charitable status; a dam will fail, irrespective of who owns it. So, we are satisfied that they will be subject to the Bill.

**Mr McMullan:** Is there any way that they could appeal that? Without mentioning any of the charities, some of them have very old laws behind them. When you get into some of those old laws, you go back into the 14th and 15th centuries, but they still hold today. They are very strong, some of them. Have we looked into that?

**Mr Porter:** Because it was raised as an issue, we asked for legal advice from the Departmental Solicitor's Office (DSO). The advice that we have been given is that the Bill will apply to them. On the back of your question, we can satisfy ourselves that that is the case. I know that that question has been asked, because it was part of the written evidence provided by a charity as part of the consultation.

**Mr McMullan:** Has any reservoir owner the right to cross other people's land for a run-off of water or anything like that in the way that Water Service has? You cannot stop water. Have they the same rights if they want to run water off across somebody's land to get it from here to the local river?

**Mr Porter:** That would not be covered under the Reservoirs Bill, but it is covered under the Drainage Order. The Drainage Order allows for the free flow of water, and a repairing owner of land must ensure that they maintain their water course to allow the free flow of water. It would not be specifically covered under the Reservoirs Bill.

**Mr McMullan:** So the Drainage Order would cover the likes of that under the Reservoirs Bill.

**Mr Porter:** It covers it stand-alone. It covers it today, and it will cover it in the future. The Reservoirs Bill will not change the responsibility of repairing owners to carry out maintenance. That is under —

**Mr McMullan:** Can it be added into your Bill that that is there and can be used?

**Mr Porter:** It is already in legislation. Under schedule 5 to the Drainage Order 1973, we have the power to serve notice on somebody to require them to carry out maintenance to allow the free flow of water where there is a problem. In essence, it is already covered by that legislation, irrespective of this Bill.

**Mr McMullan:** Can the owner of that land apply for grant aid for reinstatement?

**Mr Porter:** The legislation allows for compensation if a scheme is done to improve the flow of water. If more water had to be released through somebody's land, for instance, if there was a development site up-stream and you wanted to discharge more through somebody's ground, that would be a private matter between two individuals. However, if Rivers Agency were to carry out that scheme, there would be the ability to seek compensation for loss. Again, that is covered under the Drainage Order 1973 and not the Reservoirs Bill.

**Mr McMullan:** Will it be made known to councils that reservoirs below the 10,000 cubic metres threshold could be brought in, in case some think that theirs are below 10,000 cubic metres and the legislation will not apply to them?

**Mr Porter:** Absolutely. We have the power to call any structure a controlled reservoir, including something very small. We are just covering the bases so that we do not have to rewrite or seek change to primary legislation. We do not see us using that provision, but, if, for instance, we found a high-risk reservoir in the middle of a housing development, where its failure would have an immediate and catastrophic impact, we may choose to say, by regulation, that it is a controlled reservoir and therefore subject to the legislation. We did not find any of those. All we are doing is making sure that if we do find one, we do not have to go back and change primary legislation, because that is a long and difficult process. Implementation will be smoother if as many scenarios as possible are covered by the primary legislation.

**Mr McMullan:** With regard to RPA, I see from the list of councils that only one will be part of a group that has a reservoir. Other councils do not have reservoirs but will be going into the likes of that. Have they been informed about that aspect of the new legislation?

**Mr Porter:** Yes. I refer to the previous answer. We informed all reservoir owners and managers that we were able to identify of that, plus those who we identified as owning land under reservoirs. A lot of district councils came to stakeholder engagement events or asked us to talk to them privately. If any remain concerned, we will be only too happy to go out and talk them through and explain the implications of the legislation.

**The Chairperson:** On the point about regulating a reservoir of less than 10,000 cubic metres as a controlled reservoir, surely you will still need parameters of assessment in the primary legislation. What will that look like?

**Mr Porter:** All we are doing is taking the power to regulate a structure that is not a controlled reservoir and call it a controlled reservoir. We have not set any criteria for that at this time because all we want is the power to do that. That power will be by regulation, so we would make a specific regulation to say, "The reservoir at this particular location will be a controlled reservoir because of ..." That is the justification for the regulation. I do not see us bringing in a regulation that says, "I know we said 10,000 cubic metres but, by regulation, we are going down to 5,000 cubic metres", and catching lots of different reservoirs. The power will be used only at specific locations, so the regulation will apply to a particular reservoir and not reservoirs in general.

**The Chairperson:** Surely you will need some sort of guidance for your inspectors as to what specific reservoir is a risk.

**Mr Porter:** We did not identify any reservoirs that we are concerned about, so, at the minute, I do not see us using that power. All we are doing is making sure that, if we happen to find such a reservoir, at least we have the primary power to deal with it by secondary legislation as opposed to having to amend primary legislation. At this minute, however, I am not aware of any structures of fewer than 10,000 cubic metres that we would be minded to make subject to secondary legislation.

**The Chairperson:** So, before you could regulate that reservoir of less than 10,000 cubic metres, you would need secondary legislation. You could not just enforce something upon them.

**Mr Porter:** That is right. It would be secondary legislation specific to that reservoir. Therefore, in developing that secondary legislation, we would have to include the justification.

**Mr Irwin:** You are very welcome. Am I right in saying that the vast majority of high-risk and medium-risk reservoirs are in public ownership?

**Mr Porter:** The vast majority are, but there are a number of large structures that would have a significant impact that are not in public ownership.

**Mr Irwin:** High risk or medium?

**Mr Porter:** Both.

**Mr Irwin:** Do you believe that, if there were to be a failure of one of those, there would be a risk to life?

**Mr Porter:** There are a number of reservoirs that we are concerned about, and, even before this legislation gets on the statute books, we have been talking to owners about their structures and encouraging them to get a number of things knocked into shape. That is purely and simply because of the risk and the potential impact, and we can demonstrate that by showing them the flood inundation map. I have had the discussion with a number of owners, and, when they see the flood inundation map, which shows the volume of water, it escaping and the potential impact downstream, it certainly gets people's attention.

**Mr Irwin:** The slight concerns that I have are about the reservoirs that pose no threat whatsoever. As I said to you at previous meetings, it is important that this legislation is in no way too onerous to them. Some of those reservoirs are on land where they probably pose no threat whatsoever. It would be a pity if this ended up onerous and created a problem for them. Are you content that that is not the case?

**Mr Porter:** I absolutely agree with you that it would be a great pity, and that is why we have the low-risk category, which is where there is no identifiable risk to life and no identifiable significant impact on environment, cultural heritage and economic activity. We have identified 20 reservoirs at this stage that we think will be in the low-risk category. The requirement on the owners of those will be to register and put up a sign at their structure saying who owns it and who to contact in the event of failure. They will satisfy the legislation by doing those two things: providing registration and some public information. There will be no requirement under the legislation to have an engineer or a maintenance regime to carry out any improvement works. However, we would encourage them to be conscious that they still own that hazard and will need to satisfy themselves that they are managing that in an appropriate way. However, there will be no requirement under the legislation to do that.

**The Chairperson:** I know that it is not your remit, David, but have you explored the possibility that there could be some sort of financial support from the rural development programme funding if reservoirs have to get up to a certain standard of safety? Are you actively looking sideways in the Department to see what is available there?

**Mr Porter:** Yes. We have had discussions with them about two areas: whether there are works required, and whether there is some other scheme to do something different on the land, such as hydroelectric power and that sort of usage. The problem that we have discovered with that route is that a lot of reservoirs, particularly the high-impact ones, are in urban areas. So, whilst it may give some people a route to funding, we will not be able to say, "This sorts out this problem for people", because some of those structures will not be able to satisfy the requirement. However, there have certainly been discussions about that.

**The Chairperson:** It will hardly be a tranche or a programme of its own in the rural development programme. Is it something that you are looking to adjoin?

**Mr Porter:** It is. It will not be a stand-alone scheme, certainly not at the minute. It would be for people to fit that requirement into some of the other schemes that they have.

**The Chairperson:** OK, I suppose that that brings me to my last question: have you any concept of the timescale for its introduction?

**Mr Porter:** We still plan to get this to the Executive within November. That would allow, assuming it gets clearance, seven days for the Speaker to consider it, and then it would be introduced. At the minute, we expect that that will happen in early December. At the tail end of last week, one slight issue arose that we have to deal with concerning the impact of the legislation on the Crown Estate. We are trying to get that last issue resolved. When we do, that will allow us to issue Executive paper 2. Now, this has already been around the Departments and Executive Ministers a first time, so it is ready to go for the second time. We just need to clear up this slight issue. If we cannot get that cleared up, the timetable will be knocked back by a week or two, but we think that it will be a week or two at worst. It is a very minor issue; it is just that we have to write to the Queen's Solicitor because of the Bill's requirements on the Crown Estate. The Hillsborough Castle reservoir is the only one in Northern Ireland that is within the Crown Estate, and we just need to tidy up that aspect of it.

**The Chairperson:** Oliver, I am not sure whether your question relates to this, but I do not think that we will be able to get the Queen here to give evidence. *[Laughter.]* I say that just in case that was to be your question.

**Mr McMullan:** Based on the legislation that will come in and the fact that you know of dangerous reservoirs, are we now compelled to let those in the surrounding area know that, insofar as it affects anybody wanting to buy property near a dangerous reservoir? Can they buy such a property without being notified, only to find out that the property has been devalued? Are we not obliged to let the relevant people know this? I will come back to you on the Crown Estate, but not today.

**Mr Porter:** To give you some comfort, I and we are not aware of any of these structures being in a dangerous state. I am aware of some that require works to satisfy us that they are in a reasonable condition. Were we to be concerned about one of them going to breach at this minute, under the Drainage Order we can require people to draw down the water to arrest injury to land downstream. We have used that power in the past, and, if we were genuinely concerned about the downstream area, we would use it and not wait for a Reservoirs Bill.

You raise an interesting point about property downstream of reservoirs. To again give the Committee some comfort, provided that assurance can be given about the level of maintenance, it is perfectly safe to live downstream of a reservoir. The issue today is that we cannot give an assurance that all reservoirs are maintained to a certain standard, and that is exactly what this legislation will do.

**Mr McMullan:** My question is this: might that area be designated as a possible floodplain? It may never come to that, but they could designate it as a possible one. Is it possible for the planning authority to look at it like that?

**Mr Porter:** Yes, and the revised version of planning policy statement (PPS) 15 is out to public consultation. It has a new policy, FLD 5, which specifically about development within reservoir inundation areas. So, that is something that we identified as being a particular issue and took the opportunity of the revision of PPS 15 to include a specific reservoir policy. You will get that on the DOE website. The public consultation started about a fortnight ago and will run to the early part of the new year.

**Mr McMullan:** What exactly does PPS 15 state on reservoirs?

**Mr Porter:** It states that, for a planning permission to be granted in a reservoir flood inundation area, assurance must be given that the reservoir is maintained in a reasonable condition. Again, that will be easy when we have the Reservoirs Bill. You will be able to go to the reservoir owner and find out whether it is a controlled reservoir and has a high impact and, therefore, is subject to the legislation. You will also be able to check whether they are up to date with all their inspections and works in the interest of public safety. The planning officer will be able to access that information and take it as reassurance that it is OK to develop downstream.

We do not see a situation in which land will become blighted or sterilised because of a reservoir. It is safe to live downstream of reservoirs provided they are adequately maintained.

**Mr McMullan:** The councils will take over planning, and they will have all that information in council buildings. Anybody who puts in a planning application will only have to speak to the council that owns the reservoir.

**Mr Porter:** Yes. The other thing that we are going to do at some point is make the flood inundation maps of reservoirs available. I told you that there are 156 structures and 66,000 people could be affected. We got those figures because we have flood inundation maps. We do not want to make them public at the minute, because we are still going through a process of quality assurance and we cannot give the reassurance that something is being done about that hazard. That is the bit that we need the legislation for. Somewhere along this route, we will make those maps available.

People will not have to go to local councils but will be able to go freely on to our website. In the same way that you are able to view the strategic flood map for river water, seawater and service water, you will be able to click on the reservoir map and understand what the risk of total failure would be in a flood inundation area.

**The Chairperson:** On that point, let no one say that flood plains are not useful things. I have seen the devastation that can happen when flood plains are occupied or built on.

**Mr Swann:** I have a very quick question on that same point. If the designations show that reservoirs are dangerous or could be breached, which is why this legislation is being brought in, will it affect the price of house insurance?

**Mr Porter:** I made the point that living downstream of a reservoir is safe provided that it is maintained. The likelihood of a reservoir failing is very low. The reason that we need the legislation is that, despite that risk being very low, the impact and consequence of failure are horrendous. However, the likelihood is still very low, and, because of that, insurance companies generally do not take reservoirs as risks and inflate insurance premiums. The bit that we need to bring in is that assurance and the regulation of the maintenance. That is what controls the likelihood of failure. The impact stays exactly the same no matter how you maintain your structure. The likelihood of failure is mitigated by having good quality maintenance. That is what the legislation will bring in.

**The Chairperson:** OK. There are no more questions from members. I know that the Hansard report will be restricted until the Bill is before us. I do not know whether you will want to answer my question, but I am going to ask it anyway. What is the reservoir with the highest risk?

**Mr McMullan:** The one in Broughshane. *[Laughter.]*

**The Chairperson:** The Quoile dam?

**Mr Porter:** I can tell you which one has the highest impact. Off the top of my head, it is the Waterworks on the Antrim Road, purely because of the population density downstream. That was the one that I got the phone call about and was told that water was coming through. That is why we engaged with Belfast City Council. When we did a bit of investigation, we found that it was coming out from an overflow pipe and not through the dam structure itself, so please have some comfort that it is not at the point of failure.

That is at the top of the list for highest impact. I think that about 1,500 properties are downstream of it, and it puts water right down to the M2-York Street interchange. It would have quite a bit impact, not just on those who are wet but on normal society working around it.

**The Chairperson:** OK. Of course, it is not just the population that would be affected. Electrical substations could be affected, and that would affect large areas of population.

**Mr Porter:** We cover those effects under economic activity. We have an area for human health and we take the proxy for that as the number of people who are living and working in the flood inundation area. The area of economic activity could involve principal roads, power stations, medical facilities and things like that.

**The Chairperson:** OK. Thank you very much for your time and discussing what is important legalisation for you. David, I know that you have been working on this for a long time. We look forward to seeing the Bill before us so that we can scrutinise it. Thank you.