



Cynulliad Cenedlaethol Cymru **The National Assembly for Wales**

Y Pwyllgor Amgylchedd a Chynaliadwyedd **The Environment and Sustainability Committee**

Dydd Mercher, 10 Mehefin 2015
Wednesday, 10 June 2015

Cynnwys **Contents**

[Cyflwyniad, Ymddiheuriadau a Dirprwyon](#)
[Introductions, Apologies and Substitutions](#)

[Ansawdd Dŵr—Grŵp Trafod](#)
[Water Quality—Round Table Discussion](#)

[Ansawdd Dŵr—Grŵp Trafod](#)
[Water Quality—Round Table Discussion](#)

[Trafodaeth Grŵp ar Ansawdd Dŵr](#)
[Water Quality Round Table Discussion](#)

[Papurau i'w Nodi](#)
[Papers to Note](#)

[Cynnig o dan Reol Sefydlog 17.42 i Benderfynu Gwahardd y Cyhoedd o Weddill y Cyfarfod](#)
[Motion under Standing Order 17.42 to Resolve to Exclude the Public from the Remainder of the Meeting](#)

Cofnodir y trafodion yn yr iaith y llefarwyd hwy ynndi yn y pwyllgor. Yn ogystal, cynhwysir trawsgrifiad o'r cyfieithu ar y pryd.

The proceedings are recorded in the language in which they were spoken in the committee. In addition, a transcription of the simultaneous interpretation is included.

Aelodau'r pwyllgor yn bresennol
Committee members in attendance

Mick Antoniw	Llafur Labour
Jeff Cuthbert	Llafur Labour
Russell George	Ceidwadwyr Cymreig Welsh Conservatives
Llyr Gruffydd	Plaid Cymru The Party of Wales
Alun Ffred Jones	Plaid Cymru (Cadeirydd y Pwyllgor) The Party of Wales (Committee Chair)
Janet Haworth	Ceidwadwyr Cymreig Welsh Conservatives
William Powell	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Joyce Watson	Llafur Labour

Eraill yn bresennol
Others in attendance

Martin Bishop	Rheolwr Genedlaethol i Gymru, Confor National Manager for Wales, Confor
Michael Evans	Pennaeth Tystiolaeth, Gwybodaeth a Chyngor, Cyfoeth Naturiol Cymru Head of Evidence, Knowledge and Advice, Natural Resources Wales
Natalie Hall	Rheolwr Dŵr, Cyfoeth Naturiol Cymru Water Manager, Natural Resources Wales
Tony Harrington	Cyfarwyddwr yr Amgylchedd, Dŵr Cymru Director of Environment, Welsh Water
Peter Jones	Swyddog Cadwraeth: Datblygu Cynaliadwy, Cymdeithas Frenhinol er Gwarchod Adar Conservation Officer: Sustainable Development, RSPB
Rachel Lewis-Davies	Cynghorwr ar yr Amgylchedd / Materion Gwledig, Undeb Cenedlaethol yr Amaethwyr Cymru Environment/Rural Affairs Adviser, NFU Cymru
Dr Stephen Marsh-Smith	Cyfarwyddwr Gweithredol, Sefydliad Gwy ac Wysg Executive Director, Wye and Usk Foundation
Robert Vaughan	Rheolwr—Rheoli Tir Cynaliadwy, Ffermio a Choedwigaeth, Cyfoeth Naturiol Cymru Manager—Sustainable Land, Farming & Forest Management, Natural Resources Wales

Swyddogion Cynulliad Cenedlaethol Cymru yn bresennol
National Assembly for Wales officials in attendance

Alun Davidson	Clerc Clerc
Elfyn Henderson	Y Gwasanaeth Ymchwil Research Service
Adam Vaughan	Dirprwy Glerc Deputy Clerk

*Dechreuodd y cyfarfod am 09:32.
The meeting began at 09:32.*

Cyflwyniad, Ymddiheuriadau a Dirprwyon Introductions, Apologies and Substitutions

[1] **Alun Ffred Jones:** Iawn. A gaf i alw'r pwyllgor i drefn, os gwelwch yn dda ac estyn croeso i chi i'r pwyllgor? Mae'n gyfle i groesawu Janet Haworth yma fel Aelod newydd.

Alun Ffred Jones: May I call the meeting to order and extend a warm welcome to you all? It's an opportunity for me to welcome Janet Haworth here as a new Member.

[2] **Alun Ffred Jones:** A very warm welcome, Janet. I'm sure you'll be happy amongst us.

[3] **Alun Ffred Jones:** Y rheolau arferol ynglŷn â'r larwm tân—i ddilyn y staff allan os bydd galw. Diffoddwch eich ffonau symudol. Wrth gwrs, rydym ni'n gweithredu yn ddwyieithog, felly gallwch chi wneud sylwadau neu ofyn cwestiynau yn Gymraeg neu yn Saesneg. A oes unrhyw ddatganiad o fuddiannau o dan Reol Sefydlog 2.6? Nac oes. Mae yna ymddiheuriadau gan Jenny Rathbone a Julie Morgan. Nid oes dirprwyon.

Alun Ffred Jones: The usual rules apply in terms of fire alarms. Please follow the instructions of the usher if needs be. Please switch off your mobile phones. Of course, we operate bilingually, so you can make comments or ask questions either in English or in Welsh. Any declarations of interest under Standing Order 2.6? No. We have received apologies from Jenny Rathbone and Julie Morgan. There are no substitutes.

09:33

Ansawdd Dŵr—Grŵp Trafod Water Quality—Round Table Discussion

[4] **Alun Ffred Jones:** Y tystion cyntaf o'n blaenau y bore yma ydy—ynglŷn ag ansawdd dŵr, wrth gwrs—yw tystion ar ran Sefydliad Gwy ac Wysg a'r Gymdeithas Frenhinol er Gwarchod Adar. A gaf i eich croesawu, y ddau ohonoch chi, atom ni, y bore yma i'r sesiwn yma i gasglu tystiolaeth a gwybodaeth? Ac a gaf i ofyn i chi gyflwyno eich hunain er mwyn y record cyn i ni fwrw i mewn i'r cwestiynau, os gwelwch yn dda?

Alun Ffred Jones: Our first witnesses this morning, who will be discussing water quality, are here representing the Wye and Usk Foundation and the Royal Society for the Protection of Birds Cymru. May I welcome you both to this evidence-gathering session? And may I ask you to introduce yourselves for the record before we move to questions, please?

[5] **Mr Jones:** Yes, hello, I'm Peter Jones and I'm here on behalf of RSPB Cymru.

[6] **Dr Marsh-Smith:** Stephen Marsh-Smith, on behalf of the Wye and Usk Foundation and Afonydd Cymru, the umbrella body of the Rivers Trust.

[7] **Alun Ffred Jones:** Thank you very much, both of you, for coming in. Jeff Cuthbert is going to kick off.

[8] **Jeff Cuthbert:** Thank you very much and good morning. Could I ask you to perhaps start by giving the overall impression of the Welsh Government's new water strategy, particularly whether you think it goes far enough in terms of addressing the issues of water quality, and any ideas that you may have to go a little bit further? And one thing, if I may ask Dr Marsh-Smith to comment, is that I notice on the bar chart that you've provided about reasons and percentages for poorer water quality, you give a much higher allocation—10.9 per cent—as down to abandoned mines, whereas the Welsh Government's similar bar chart gives it a much lower percentage, about 6 per cent, and gives sewage a much higher percentage. What's the reason for that? So, the overall picture and that issue in particular.

[9] **Alun Ffred Jones:** The overall picture?

[10] **Mr Jones:** Okay. Thank you. If I go first, I take it that members of the committee have read our written submission, from RSPB Cymru, and you will have noted from that that I've made some preliminary comments in relation, specifically, to the new Government water strategy, which, of course, incidentally, had just been published ahead of this committee's inquiry. We, as RSPB, had a particular concern in relation to the water strategy that, whilst it is understandably focused on water-quality concerns as they relate to human consumption—we understand that—obviously, as a conservation body, we're also concerned about the water needs of wildlife in Wales. Obviously, there's considerable overlap, if you like, in terms of quality for humans and quality for wildlife, but we are very concerned that the strategy doesn't discuss the needs of wildlife in this context at all. Indeed, when we made our initial submission in response to the consultation back in the summer of last year, we actually put in a request for a section, a chapter or whatever, on wildlife needs and interests as they relate to water and water quality in Wales. This, unfortunately, seems to have been somewhat ignored. In consequence of that, a) we would like the committee, when it reports, as I assume you will on this inquiry, to have something to say about wildlife and the needs of wildlife, and, obviously, I recognise, of course, in terms of the water framework directive and so forth, that wildlife interests come into consideration in that regard. We want this to be recognised, and we're concerned, I think, that the absence of wildlife and wildlife needs from the water strategy itself regrettably might reflect a broader attitude on the part of Government. I mean, we're all, of course, no doubt looking at the environment Bill at the moment—the draft environment Bill. The RSPB and other environmental non-governmental organisations are particularly, again, concerned about, amongst other things, what we see as the weakness of concerns in relation to Welsh biodiversity. We recognise the whole approach in terms of ecosystems—ecosystem services—but, of course, the basis of an ecosystem is biodiversity. Again, we're concerned that the Government may be paying more lip service to biodiversity than taking practical measures to ensure that its intrinsic value is recognised, respected and pursued. We would like to see more recognition, if you like, given to, in particular, the second wellbeing goal in the Well-being of Future Generations (Wales) Act 2015, the resilient Wales provision, for maintenance and enhancement of biodiversity. We would like to see more recognition of that in the Bill, and we would like to have seen that recognised, in turn, in the water strategy, and, through that, of course, into your inquiry into water quality.

[11] **Alun Ffred Jones:** Diolch yn fawr.

[12] **Dr Marsh-Smith:** If I take your specific question first, my area is the Severn river basin district. Because that includes most of south Wales, the proportion of mine water failures is much greater within that river basin district as opposed to west Wales and the Dee in the north.

[13] **Jeff Cuthbert:** Oh, you surprise me. Okay.

[14] **Dr Marsh-Smith:** Well, it's a Natural Resources Wales statistic. I've copied it straight off their presentation on the subject.

[15] **Jeff Cuthbert:** I only interrupt because, knowing the course of the Severn, it's quite some distance away from mining activity.

[16] **Dr Marsh-Smith:** Well, the Severn river basin district includes the Taff and all the various rivers—

[17] **Jeff Cuthbert:** Ah. Right. Okay.

[18] **Dr Marsh-Smith:**—which is certainly one way of—

[19] **Jeff Cuthbert:** Yes. That's a different—. I accept that.

[20] **Alun Ffred Jones:** Do you want to comment on the first question in general?

[21] **Dr Marsh-Smith:** Well, I think we do have a bit of a problem in ensuring water quality in Wales. Much of it is about providing good drinking water and everything else, and we have a water company that has spent huge sums of money on various purification systems, where, we have to ask: why has all that been necessary—it's all in place now—when, in Wales, we should have perfectly naturally pure and clean rivers? The answer, I'm afraid, lies in land-use issues. The two principal negative factors on water quality are forestry and, of course, agriculture. There are things going on that are attempting to put that right, and we like a lot of what Government has done with its strategies on forestry, and I think we're going to like what they're doing with the next round of the rural development plan. I have five farm advisers in my team, going individually around farmers, trying to sort out specific water quality issues. We are finding lots of reasons why these rivers are suffering as they are. But, equally, they are very easy to put right: simple investments in infrastructure and farms, clean and dirty water separation, good soil management—all the basics. And, I'm afraid, it just isn't there at the moment, but I think it's going to come, so I'm not going to be too pessimistic on this occasion.

[22] I'm very happy to tell you a story of how, in the nature fund, a farm adviser went to a farm, produced a plan—all of the details of what he was doing—and we didn't have enough grant to do it, and so it got set to one side. But then, NRW announced that they were increasing the number of farm visits, and we had a phone call from the farm very soon after, saying, 'Can you come and help with this particular thing? I'll pay.' That's how important the balance between regulation and delivery can be; it can be very useful in sorting out all of these issues in at least farming anyway.

[23] **Alun Ffred Jones:** Llyr.

[24] **Llyr Gruffydd:** Gan eich bod yn sôn am ffermio, rwy'n awyddus i bigo lan ar hynny mewn gwirionedd. Rydych yn cyfeirio at yr unigolyn yn dod atoch a dweud eu bod yn barod i dalu, ond, wrth gwrs, nid yw pob amaethwr mewn sefyllfa i dalu am brosiectau isadeiledd neu beth bynnag sydd angen ei wneud i fynd i'r afael â rhai o'r problemau yma. Rydych yn cyfeirio yn benodol at unedau dofednod yn eich papur chi a'r cynnydd yn nifer y rheini sydd yna yng

Llyr Gruffydd: Given that you were talking about farming, I am, in fact, eager to pick up on that. You referred to individuals and their willingness to pay, but, of course, not all farmers are in a position to pay for infrastructure projects or whatever needs to be done to tackle some of these problems. You refer specifically to poultry units in your paper and the increase in the number of those in Wales and the fact, you say, that there are insufficient constraints in place in terms of

Nghymru a'r ffaith, rydych chi'n dweud, fod yna gyfyngiadau annigonol o safbwynt rheolaeth ar yr unedau yma. Y cwestiwn, felly, gen i yw: beth ydych chi'n dymuno i Lywodraeth Cymru, awdurdodau cynllunio lleol ac efallai Cyfoeth Naturiol Cymru ei wneud i gryfhau neu i wella'r sefyllfa yna?

the management of these units. My question, therefore is: what do you want to see the Welsh Government, local planning authorities and perhaps Natural Resources Wales do in order to strengthen or improve the situation in terms of these units?

[25] **Dr Marsh-Smith:** Specifically then with poultry units, the siting of these things is very important. Siting them near watercourses, where poultry manure can get into them, is a serious problem, allied to the fact that the management by the regulatory bodies I don't think has come prepared for this huge surge in this business. In Radnorshire, it's gone from something like four or five units to 60 or 70 in just a very short space of time. Of course, it's a money winner for farmers, at the moment, but it'll work against them in the end because the cost of chickens will go down. But, at the moment, it's a very popular and successful farming business strategy. But it's a question, I think, of the planners catching up with the risk and also the regulatory body, NRW, putting in place certain things to ensure that the watercourses are protected from this.

[26] **Llyr Gruffydd:** Ond pa fath o bethau, felly? Mae capasiti yn un peth, wrth gwrs; mae hynny'n sefyll i reswm, ond rydych yn sôn am osod trefniadau yn eu lle—pa fath o drefniadau? Rydych yn sôn am dynhau rheolau cynllunio, er enghraifft, neu drwyddedu.

Llyr Gruffydd: But what kinds of things, then? Capacity is one thing, of course; that stands to reason, but you're talking about putting arrangements in place—what kinds of arrangements? You're talking about tightening planning rules, for example, or licensing.

[27] **Dr Marsh-Smith:** It's very important that the geography—. Not siting them in a place where anything that overflows will run into a river, because that's a risk, and making sure that they have in a business plan a method of disposing of whatever manure that they need to dispose of. Some use anaerobic digesters and some chuck it on the fields, but it has to be certain that that will not end up in a river or two.

[28] **Alun Ffred Jones:** William.

[29] **William Powell:** Diolch, Gadeirydd. Good morning, both. I wanted to ask you about the issues around commercial forestry because, in your evidence, you cite that as a significant source of pollution. NRW contends that it's been making some progress in the public forestry estate. Can you expand on those comments and also comment on their sense that they're making progress in this area.

09:45

[30] **Dr Marsh-Smith:** Well, I think it's true. They are making some progress. You have to appreciate that it's only after 40 years or so that what they call a forestry coupe—an area—is felled. What do they do next? We have persuaded NRW—we did a joint project with them—to restore the wetlands within these large forestry plantation areas, and this has huge significance and benefits for water. If we can contain the water on the hills, back in the old wetlands and so on, we improve flows in the dry periods and we reduce flooding all in the same procedure. When forestry is replanted, they have to leave 10 per cent unplanted. That's the general rule. If we can persuade them to use that 10 per cent to recover the wetlands, block in the drains and store water up there, there are huge gains. And we have been doing this, and so has the RSPB in Vyrnwy, with some success and some monitored results of it as well.

[31] The other problem is acidification, and these high altitude spruce forests—they trap this occult acidity in the air, and the rainfall comes, down it goes, down the drains and into the rivers. We've had experience in the Irfon, the Glaslyn and rivers in that central area of Wales, where there is very poor base geology, of very low pH events, down to a pH of 3 at times, and, of course, that destroys all invertebrate life, all fish life and everything else. You get this fantastically gin-clear stream with nothing in it. Well, we've been liming those and we've now got salmon back into the upper Irfon, as far as they can go to the falls at the top there, and similarly on the Tywi—stuff is happening there too to improve the situation.

[32] **William Powell:** Yes, and the community had the opportunity to see what the RSPB has been doing in Vyrnwy a couple of years ago, and that was exceptionally interesting.

[33] **Alun Ffred Jones:** I'm sorry, what river did you refer to—the Irfon?

[34] **Dr Marsh-Smith:** The Irfon, yes.

[35] **William Powell:** I've also had the opportunity, as you know, due to your kind invitation, to see you showcase some of the work you've been doing in catchment management and so on with the former Minister a year or so back. I wonder if you could expand on the work that you referred to in partnership with the Environment Agency in Herefordshire on the betterment of water quality.

[36] **Dr Marsh-Smith:** Well, the Environment Agency did some sums and they found that, whatever money Government and everybody else had, there was going to be this big bit up here that was not going to be funded in order to get the water framework directive done. Someone, I'm not sure who, had an idea that, if we could get together in a catchment-sized group and persuade industry, agriculture and everything else to put up whatever they could put up by way of funds and activity, we could perhaps progress some of the unfunded areas of improvement under the water framework directive. And we've had some success. A well-known quarrying firm in Wales has contributed a six-figure sum to assist with the upper Arrow and the well stream—the Gilwern there. The big poultry unit, Cargill's, has agreed to put up some money and set up a scheme so that new things, new poultry units, will conform to a certain standard, which is what we want, but it's not done via the planning authority. We are hoping a large crisp manufacturer will similarly adopt a stream, which they've not looked after very carefully, I have to say, in Hereford and which eventually runs into our Wye again. But that's how it works.

[37] **William Powell:** Okay. What is your sense about the level of communications between NRW and the Environment Agency over shared water flows and so on in terms of policy development?

[38] **Dr Marsh-Smith:** I can only talk about the Wye, William. We've had a great success there. We did a joint project with EA, NRW, the water company—Welsh Water—and the Canal and River Trust, who are going to be in trouble if too much restriction of abstraction takes place, and we came up with a scheme to regulate the way the flow went so that we conform with the environmental requirements and we get the taps on and the canal full of water.

[39] **William Powell:** Excellent. That's good news. Thank you.

[40] **Alun Ffred Jones:** Diolch yn fawr. Does anybody else want to take up some further questions addressed to Mr Jones? Llyr?

[41] **Llyr Gruffydd:** One area that many of us, I think, share a frustration around is payment for ecosystem services and the slow development, really, of practically

implementing some projects and some examples. Clearly, the Government are saying the right things but the frustration is that we're not seeing anything happen. I'm just wondering whether you had any views about how that could best progress and, you know, NRW and the Welsh Government having that brokerage role, really, in facilitating some of those payments and some of those schemes.

[42] **Mr Jones:** Well, we would certainly, as RSPB, welcome further exploration of how PES schemes can best be used, including in relation to water and water management in particular. This is something, clearly, that we want to see progress. There's also the issue of general binding rules—GBRs—in which we see more immediate value. I think that I have to say that we're rather disappointed again that the draft environment Bill, perhaps surprisingly, omits any proposal in relation to legal provision for general binding rules here in Wales. These have been used in Scotland now for a number of years, and apparently very successfully, as a means of regulating land management behaviour, including water management. We would like to see this provision extended here in Wales. We noticed that, perhaps, the left hand isn't talking to the right hand within the Welsh Government, because the water strategy does commend GBRs, but they are, as I say, absent from the environment Bill. That is in spite of the fact that the environment White Paper at the beginning of last year did talk about GBRs as a possibly useful tool in relation to environmental management, and water management in particular. So, we would certainly like to see this committee recommend in its report that GBRs be reinstated into the Government's environment Bill. I mean, we recognise that the problem appears to be from a Government point of view—one of resource and so forth; the usual problems—but even having GBRs and setting out areas within which we would look for this kind of regulation would be awareness raising, at the very least, amongst farmers and landowners.

[43] **Alun Ffred Jones:** Can you explain what a GBR looks like?

[44] **Dr Marsh-Smith:** General binding rules.

[45] **Mr Jones:** Sorry, the general binding rule. It's simply a statement of regulatory requirement setting thresholds, or limits, if you like, on permissible land management behaviour that stops short of actually requiring, for example, formal licensing in order to undertake a particular operation. But, it sets out criteria that, through regulation, Government is expecting to see in terms of land management. Certainly in Scotland it has a legal standing and it's accompanied by provision for sanction against those who fail to abide by particular regulations. I think they're mainly financial restrictions. But, this seems to us to be a simple way—and, indeed, the water strategy seemed to be saying this as well—of improving land management regulation without getting too involved in terms of potential legal issues.

[46] **Llyr Gruffydd:** Obviously, farmers would have a very different view, and we've seen that in their evidence for today. What they say is that they're already governed by a raft of rules and regulations in this area and that using that approach is a rather blunt tool, really, and that maybe a more consensual, more voluntary approach would, in the end, be more effective and, longer term, more sustainable as well.

[47] **Mr Jones:** Well, obviously, one always likes to see voluntary schemes in operation, but the simple fact of the matter is, as we can see in terms of water quality management in Wales, that however well-meaning particular landowners and farmers might be, the situation falls far short of what we would like to see. Simply introducing this regulatory regime with some kind of sanctions for breaking the regulations we would expect to be helpful. I mean, if farmers want to do it anyway, great; what are they complaining about? The regulations are not going to change their behaviour. But, for those who choose not to observe these requirements, hopefully, having GBRs will introduce a constraint that might persuade landowners to do things they wouldn't otherwise do.

[48] **Llyr Gruffydd:** So, would you advocate that happening on an EU-wide basis, because one of the issues here is that farmers feel they'd be at a competitive disadvantage if they were playing to different rules?

[49] **Mr Jones:** Sorry, on what sort of basis?

[50] **Llyr Gruffydd:** On an EU-wide basis.

[51] **Mr Jones:** On an EU-wide basis. Well, that's always an argument for not having regulation, isn't it—that's it's going to constrain the ability of an enterprise, whether it's a farming enterprise or any other kind of enterprise, to pursue its commercial objectives. But, the fact of the matter is that commercial objectives, in our view, need to be constrained by environmental considerations, and I wouldn't accept that as an argument, therefore, no.

[52] **Dr Marsh-Smith:** I would slightly differ on that. I think there is plenty of regulation in place. We find, typically, a Welsh farmer overstretched, overworked and underinvested in. What he needs is help and we find our farm advising team, which has a specific water quality remit, can go to them and say, 'We can see you're worried about this; this is what you've got to do'. If you explain it very carefully in a scientific way, we find we get an uptake of around 85 per cent—98 per cent in one area, is our best—and they put it right; that's the key to it.

[53] **Mr Jones:** Could I just come back on that? I'm not disagreeing at all with Stephen on that point. I mean, that is absolutely right. All I'm saying is that, in our view, we need a regulatory framework that would, shall we say, encourage farmers and landowners to do what they might not otherwise be inclined to do. But, obviously, the kind of information, advice and guidance that's available from different quarters will form part of making that framework work.

[54] **Alun Ffred Jones:** Is the situation different, then, in your part of the world, because of your presence and the way you work, than in most or many other parts of Wales?

[55] **Dr Marsh-Smith:** Yes, but we are hoping to extend it across Wales, because it does seem to work quite well. We've taken whole water bodies that have failed on every reason and now got them up to good again, just by working with individuals.

[56] **Alun Ffred Jones:** Are you on this point, Janet?

[57] **Janet Haworth:** Yes. Excuse me; I've got a bit of a cold. I'm very interested in what you were saying about replacing the wetlands and the peat bogs on the higher hills and your comments on pollution and water quality. It seems to me, if we get this right, it's good for everybody: it's good for the wildlife, it's good for us and, ultimately, it's good for the farmers, because it is about sustainability. We can't abuse the land if we want it to go on producing and supporting us all.

[58] So, you mentioned a framework and I'd be quite interested in how you envisage that working. I take your point about the pressures that some farmers are experiencing and I've always been of the view that we need to bring farmers in to contribute to environmental management and sustainability—that they are part, in a way, of the workforce. We kind of see them as farmers, but they have a major contribution, I think, in the way they work, to helping with that. I'm interested in the comments you made about Scotland. I lived in Scotland for 12 years and I have seen various initiatives there where local authorities are working with farmers. I mean, the classic one is, when it snows, the farmers there have kit that goes in front of their small tractors, they have roads that they're designated to go out and clear, and they go out and help people who are in distress, and this is an arrangement that is in place. It seems to

me that you're thinking of some kind of framework whereby we can be working more constructively and positively with farmers on the issues you mentioned.

[59] **Alun Ffred Jones:** Any comments on those statements?

[60] **Dr Marsh-Smith:** Well, it's our own initiative. The Rivers Trust originally set up what's called catchment-sensitive farming and the Department for Environment, Food and Rural Affairs hijacked it and did something with it that I didn't think was very good. We're now taking it back to that one-to-one relationship with the farmer. Every day I get a good surprise with this, with a farmer ringing up and saying, 'It's worked' or 'I never thought we'd solve that problem', or whatever. But it does require that individual sort of approach, and we have a particularly useful scientific mapping programme that assists in developing it as well.

10:00

[61] **Alun Ffred Jones:** William, did you want to come in on this?

[62] **William Powell:** It was simply the question as to whether or not you've been involved in delivering Farming Connect projects, masterclasses or whatever on these specific issues, because it seems that would be a way of upscaling the work that you're doing.

[63] **Dr Marsh-Smith:** Well, for example, we've run a trial to see if we can stop the run-off from maize fields, and we've set up a series of places near you, William, particularly, where we've stopped overland flow, and the big problem there. We work separately from them—Farming Connect—in the same way, but our remit is just simply and solely water quality, and keeping the land on the land.

[64] **William Powell:** It just seems to me there is the potential for growing that relationship.

[65] **Dr Marsh-Smith:** Very much so.

[66] **Alun Ffred Jones:** Russell.

[67] **Russell George:** This is a rather general question, but with regard to improving water quality, what's your relationship like in both your organisations between yourselves, Welsh Government and NRW?

[68] **Dr Marsh-Smith:** Do you want to go first, Peter?

[69] **Mr Jones:** Gosh. I'm not sure how to answer that, to be perfectly honest with you.

[70] **Russell George:** Is it a good relationship, or could it be improved? What could be done—?

[71] **Mr Jones:** We have had a good relationship with officials within Welsh Government, particularly in the water department, or whatever they're now calling themselves. Indeed, I think Bill mentioned our Vyrnwy site earlier, and we have taken Welsh Government officials on more than one occasion, including myself, up to our Vyrnwy site to see what's being done there in terms of blanket bog restoration, re-wetting, and the benefits in terms not only of improved water colour and quality, but also flood management and, of course, carbon retention. So, I would say we've got a good working relationship with those members of Welsh Government who are active on a day-to-day basis, engaged in these kinds of issues. I've mentioned before, however, that we are disappointed that the recent water strategy doesn't recognise wildlife interests in the same way as we would like to have seen, and we

will discuss that, I'm sure, with officials as we go forward.

[72] **Russell George:** And with NRW as well?

[73] **Mr Jones:** I can't comment, I'm afraid, on NRW. In terms of my day-to-day work, I don't have any particular dealings with NRW. But, I'm not aware that we have any difficulties in relation to one-to-one relationships.

[74] **Alun Ffred Jones:** And Stephen.

[75] **Dr Marsh-Smith:** We have a very good relationship with NRW, on a series of joint projects, and their predecessors as well, spanning back the best part of 20 years. They've been, in the main, very successful. We also have a good relationship with the people we know in Welsh Government—not everybody. But just to pick on something that Llyr mentioned, with paid ecosystem services, there is now a dedicated, very senior officer developing that, and I think she's probably going in the right direction there, with a bit of help from everybody else.

[76] **Russell George:** So, there's nothing that you think could be improved, in that you both suggested you've got good relationships with both organisations. There's no improvement that can be made to have better outcomes between your organisations and the two I've mentioned.

[77] **Alun Ffred Jones:** Can I add to that question? You were talking about developing or rolling out some of the work that you've been doing to other parts of Wales. Is this part of the remit of NRW? Should it be?

[78] **Dr Marsh-Smith:** Setting up partnerships such as the one we have with them in other areas, with other river trusts, is our hope there. But, to answer your question, we have the joy of working in England and Wales, and here's a plug now for devolution: speaking to anyone in Wales is a joy. You can get to who you want to speak to quickly. They're always available, and you can get an answer. If you try DEFRA, I don't know.

[79] **Russell George:** Why is that, do you think?

[80] **Dr Marsh-Smith:** Well, there are so many people there, and there are committees and groups, and, you know, it's almost impossible. You have to get up a very long chain of things. In Wales you can get to who you need to speak to almost immediately.

[81] **Mr Jones:** Could I just add to that? Going back to Russell's earlier question, we find it very easy to approach officials, certainly in the Welsh Government, as and when we feel the need to do so. We just wish they would approach us more often.

[82] **Russell George:** That was part of the point behind my question.

[83] **Mr Jones:** If we don't approach them, they don't approach us, and that's rather disappointing, because, obviously, we and other organisations do have views and interests that we're trying to express. We would like that, perhaps, better recognised by Welsh Government officials, and not waiting for us to approach them.

[84] **Alun Ffred Jones:** Right, well—. Yes, a quick question.

[85] **Joyce Watson:** There is a connecting body of organisations, and I just can't think what it's called now.

[86] **Mr Jones:** Are you thinking of Wales Environment Link?

[87] **Joyce Watson:** I am. Do the Government officials or NRW engage with those people, and, surely, you would be around the table?

[88] **Mr Jones:** What Wales Environment Link does do, I think on a biannual basis, is have meetings with the relevant Minister, and it's open to Wales Environment Link to raise any issues that it wishes to discuss with the Minister, and clearly vice versa, although it tends to be more one-way from Wales Environment Link. So, that process works, but it's a quite distant kind of relationship. These meetings, in my experience, often only last an hour or so. There might be several major issues that we as well want to discuss, and it's very difficult to see what actually productively flows from those meetings. So, there is that kind of contact, but it's very limited.

[89] **Alun Ffred Jones:** Okay. Well, we've had two slightly different takes on the matter here—one fairly benign view from Mr Marsh-Smith and perhaps a more hesitant view from Mr Jones. Can I thank you both for coming in today and for contributing to our brief inquiry? Thank you very much. Diolch yn fawr.

10:08

Ansawdd Dŵr—Grŵp Trafod Water Quality—Round-table Discussion

[90] **Alun Ffred Jones:** A gaf i groesawu y ddau dyst nesaf, un yn cynrychioli'r NFU a'r llall o Confor? Diolch yn fawr i chi am ddod atom ni y bore yma; rydym yn edrych ymlaen at glywed eich sylwadau chi i ni. A gaf i ofyn i chi jest gyflwyno'ch hunain a dweud pwy rydych chi'n ei gynrychioli?

Alun Ffred Jones: May I welcome our next two witnesses, one representing the NFU and the other Confor? Thank you very much for joining us this morning we look forward to hearing your comments. May I ask you to introduce yourselves, and tell us who you're representing?

[91] **Ms Lewis-Davies:** Rachel Lewis-Davies, NFU Cymru.

[92] **Mr Bishop:** Martin Bishop, Confor—the Confederation of Forest Industries.

[93] **Alun Ffred Jones:** Diolch yn fawr. **Alun Ffred Jones:** Thank you.

[94] Jeff Cuthbert is going to kick off with the questioning this morning.

[95] **Jeff Cuthbert:** Thank you, Chair. Good morning. I wonder if I could ask you, by way of starting this discussion, your general views on the approach of the new water strategy in terms of improving water quality—whether you feel it goes far enough, whether there are other steps you would like it to take, particularly in terms of the agricultural industry, and, indeed, whether you think, in terms of the new RDP, there are any gaps in terms of assisting farmers to be able to improve water quality.

[96] **Ms Lewis-Davies:** Thank you for your question. We took the opportunity, as NFU Cymru, to respond to the consultation on the water strategy during 2014. I think it was useful, and the document we've got is useful in informing the decision-making process over the coming years. The RDP is particularly useful now, in that it's just been signed off; our programme for Wales has been signed off by the Commission. So, it's at this critical moment now where we're looking to develop and implement the schemes that are rolled out. We've followed the development of the programme quite closely, or as closely as we can, and

certainly we would agree that the measures in the box, the tools in the box, are the right ones, but they need some thoughtful and careful consideration now to make sure that they really deliver.

[97] So, if I can use the example of Farming Connect, which in the forthcoming programme will see £45 million—I think in the last programme, it received £30 million—Farming Connect is a really far-reaching programme to develop the Welsh agricultural industry. It's got a range of themes, so a range of objectives to meet, but, of course, it's going to be a key tool in delivering that key advice on improving water quality on Welsh farms. What I would say with Farming Connect is that we need to move from that solid foundation of raising awareness to 18,000 businesses on how they can generically raise the quality of water to using it in a targeted way. This requires some join up with NRW, so that we understand where the difficult catchments or the priority catchments for action are, and then working with NRW, with a field force from NRW, if we had our way, working together, getting out on those farms, using those trusted relationships, which Farming Connect is so good at establishing with the farming industry, and doing it on a catchment basis. Then, what we need to do is use the other tools in the box in the RDP.

[98] So, under Glastir for example, we really, really need to see the small grants scheme come online because that's where your key opportunity is to do some of this work that we badly need on riparian habitats and things. We've also got a sustainable reduction grant, which will be at an intervention rate of 40 per cent. That's a significant opportunity for the industry. Remember that the industry will be funding this from their own pockets to the tune of 60 per cent, so what we don't need to do is make it a very difficult process to go through. We need to join it all together and it requires more co-ordination than we've seen in the past.

[99] That's the challenge; it's a challenge for NRW to co-ordinate with Farming Connect and use—. We can all go around raising awareness, but you don't take action until you realise it's an issue in your area, so that's the next level that we really need to get to. This is the challenge and it's a huge opportunity and we need to get it right now because we've got the tools in the box to make significant progress, but we won't if we adopt a 'business as usual' approach.

[100] **Alun Ffred Jones:** Ocê. Llyr, wyt ti am ddod i mewn? **Alun Ffred Jones:** Okay. Llyr, do you want to come in?

[101] **Llyr Gruffydd:** Just to pick up on your comments around the RDP, the key things we hear now are that the particular schemes and the particular projects that are going to be implemented are developed in a way that's done hand in hand with those who will actually be in the front line—the farmers and organisations such as yourselves. So, I presume that you would be particularly keen to see a co-production approach to some of the delivery mechanisms that are going to be implemented, so that those who are actually delivering on the ground have already bought in to the approach that's going to be adopted.

[102] **Ms Lewis-Davies:** Absolutely right, Llyr. We see the RDP as an almost £1 billion opportunity to drive forward this transformational change that we need to see in the industry. That's about the environment, but if you make efficiencies, you will deliver a benefit for the environment and climate change as well. So, it's seeing it in that holistic round and, as I say, we've got a clear vision and we're very keen to be involved. A lot of these measures—. The SPG, the sustainable production grant, is new this time; Farming Connect is not new, but it's about taking it to the next level. All of these things are useful and are useful tools to have in the box, but they need to be, as you say, developed so that they've got the farmer in mind because, ultimately, it's the farmer who does all this environmental action on the ground, not the rest of us here. So, a strategy is fine—going back to the strategy—we know where we're aiming for, but ultimately we're looking to work with farmers who have 80 per cent of the

land area in Wales to make these improvements.

10:15

[103] **Llyr Gruffydd:** Just picking up on Glastir as well, you do express concerns that the new RDP seems to focus water-quality interventions through the Glastir Advanced scheme rather than the entry-level scheme. What impact do you think that this could have on farm businesses and water quality in areas not in the advanced scheme?

[104] **Ms Lewis-Davies:** Obviously, they're targeted in the areas where they want to do the most work, but that relies on those specific farmers wanting to engage in the scheme and for some reason, in some areas, a whole-farm scheme doesn't suit you. So, what we're finding, increasingly, is a lot of frustration from farmers who want to go into advanced, but can't because they're outside of the mapping area and then, on the other hand, we're seeing farmers who would probably fall into that mapping area, but for various reasons, or for business decisions, a whole-farm scheme doesn't suit them. So, what we really need to see to support those is for them to just make the grant scheme available—a part-farm scheme or a small grant scheme. We need that up and running to get this—. Like I say, it's quite simple: the two main things that are going to improve water quality are your riparian habitats—so, fencing off streams and corridors and things like that—and then, also, investment in infrastructure. Those are the two key things that are going to make the measurable difference. So, I think the infrastructure would come through the sustainable production grants. So, I think we just need to have a focus on that and reduce the number of loopholes that they've got to jump through really. My concern, generically, over Glastir is that we're seeing some de-emphasis of entry and possibly a delay on the small grants and the part-farm scheme, and they're where you're going to get your quick wins.

[105] **Alun Ffred Jones:** I'll come to you now, William. Martin.

[106] **Mr Bishop:** Just to come in on the RDP, we welcome any developments on the RDP, but, as yet, we haven't really got a working RDP for woodlands in Wales. We have the woodland restoration bit, which is for the restoration of the infected larch. We are still trying and waiting to get the chance to put the input into Glastir woodland creation to look at the terms and conditions and the rules and the scoring system. In the past, it's been far too complicated and if you want uptake of grants, make it simple. We really want to have some input into that very, very rapidly because both Glastir woodland creation and Glastir woodland management are not active schemes at the moment.

[107] **Alun Ffred Jones:** William.

[108] **William Powell:** Thank you, Chair. I wanted to look at a particular group of farmers who find themselves in real difficulty and that is those whose holdings are in nitrate vulnerable zones. I wonder whether you consider that they are having sufficient support at the moment in the challenges that they face. I'm particularly familiar with the problems faced by those who farm in the vicinity of Llangorse lake, which has been a particular area of concern. Also, do you think that Farming Connect, in partnership, possibly, with the RDP, could assist them in exactly the way that you described earlier, in a more general sense?

[109] **Ms Lewis-Davies:** I think that would be useful. In terms of the NVZs, we know that there are some established NVZs in Wales already. The regulatory burden associated with trying to farm in an NVZ is significant to say the least. Looking forward, we're going into a review of NVZs and we could see some new areas of Wales designated, I think, by 2017 or 2018. What we've said all along, from the beginning of the last designation, is, 'This monitoring is ongoing. NRW, previously EA, you've got this data; share this data in a way with farmers so that farmers can take voluntary measures now, in the hope that they can

reduce their impact and avoid the regulation.’ But that, unfortunately—. We’ve not seen that, almost like a red, amber and green light system—that’s what we’d be very keen to see—developed to the stage that it could be.

[110] That brings me on to the point about NRW, obviously here, not so long ago, talking about contributing to the scrutiny. With NRW, we are two years in and we recognise that there are still some challenges. The key challenge for our sector, I repeat, is: how do you engage with 18,000 small businesses who’ve got 80 per cent of the land? The answer, to me, is quite simple: you engage a field force or a farm liaison team. It’s a model that’s worked well within Welsh Government. Why do we not have it in NRW? The staff are in NRW—the former Environment Agency staff, they’re there; they just need empowering to go off and do this work on the ground with farmers in a voluntary way. You’ll go far, far and away above—you’ll achieve far more—by working with farmers in that voluntary way, if you want to really add value, than any regulation will ever deliver for you. Regulation is a baseline; it’s a race to the bottom.

[111] **William Powell:** I think there’s some parallelism there between what you describe and the project officers of CCW, back in the day, who were assisting in the delivery of Tir Gofal.

[112] **Ms Lewis-Davies:** Fantastic. You build those trusted relationships—. You know, I’ve been in the work of extension or knowledge transfer for many years. On those trusted relationships, I’ll have farmers ring me now, even though my role’s changed probably three times, four times; those same farmers still ring me now, because the established relationships are there. The trust. They know if you haven’t got the answer you’ll find it for them. It’s not about getting yourself into trouble; it’s about getting yourself out of trouble: ‘Who do I ask to get, you know—?’ It’s understanding, ‘Is it a problem, isn’t it a problem?’ It’s that sort of advice that farmers really need. I think that’s where in NRW, those people within the organisation, able to assist, are invisible to farmers at the moment.

[113] **Alun Ffred Jones:** We heard from a previous attendee, Stephen Marsh-Smith, from the Wye and Usk Foundation, that they had been doing a lot of work with individual farmers alongside—correct me if I’m wrong—officials from—

[114] **William Powell:** The Environment Agency in Herefordshire was the example.

[115] **Alun Ffred Jones:** So, is that a model that you would advocate?

[116] **Ms Lewis-Davies:** I think anything that helps you to deliver environmental action on the ground has to be welcomed, but you’ve got to remember that farmers are operating quite a confusing regulatory framework. And, it’s not just environmental regulation farmers are having to deal with; it’s a lot of animal health, there’s a lot of rules surrounding the basic payment scheme. So, I think there’s a danger that it becomes too confusing for farmers to engage with. I think the opportunity of delivering via your Farming Connect route is—. What gets a farmer to go and engage with a topic? It’s about making their business more efficient and improving the performance of their sector; so, whether it be beef, sheep or dairy, they go out to do that. So, the Farming Connect field force is there, and they’re used to engaging with farmers on a range of issues, so it’s basically a latch on to that trusted relationship. I think if you went out and said, ‘Right, I’m going to do an event on water quality, and we’ll do them across Wales’, it’s not necessarily what most farmers would buy into. If you go and work in a targeted catchment, where they realise it’s a problem on their doorstep, they may engage with it. But, I think the key with Farming Connect is it builds on those trusted relationships that already exist.

[117] **Alun Ffred Jones:** Martin.

[118] **Mr Bishop:** I have an unashamed plug for my side of the sector of the industry. Trees and woodlands, they are nitrogen sinks. If you have nitrogen vulnerable zones, plant trees. This will certainly help. We've got a publication—I can leave a copy for the committee if you wish—on 'The Role of Productive Woodlands in Woodland Management' for Confor, written by Forest Research, which makes a lot of these points.

[119] **Alun Ffred Jones:** Okay. Right. Diolch yn fawr. Joyce.

[120] **Joyce Watson:** I want to ask you—leading on quite nicely, I suppose, from what you've been saying, Rachel—to expand on NFU Cymru's opposition to the possible introduction of general binding rules to tackle diffuse pollution. They are actually in operation in Scotland.

[121] **Ms Lewis-Davies:** Yes, I've researched Scotland. General binding rules. First of all, they're not operating in isolation; we need to look at the whole regulatory landscape. Regulation costs businesses, and also it can add to confusion. So, farmers are regulated by cross-compliance and there's a number of directives they're required to comply with. So, to assume that there's not regulation—there's a vast amount of regulation farmers are already complying with. In the Scottish model, they have general binding rules for very specific activities. The consultation that we saw in Wales last year was for some very generic things that would be very difficult, I suggest, to actually turn into a general binding rule. Also, in Scotland, my research tells me, and my colleagues in Scotland tell me, that their general binding rules have been accompanied within SEPS with a significant field force—the exact field force that I'm talking about—and the capacity to give that advice service to the industry. So, it's not just regulation; it's doing the advice bit well first, which we're not quite in the position of achieving yet. Hence, I think my comment is it would be premature for NRW to have additional regulation powers at the moment. I think I'd put that into the response.

[122] **Joyce Watson:** Can I just explore this a bit further, Chair? If everything else was in place, would you support them? Are you saying that you don't support them now because you don't believe that the help for implementation or guidance is in place?

[123] **Ms Lewis-Davies:** I think if our vision of the RDP and how it could be delivered were delivered, there would be no need for them. We'd be delivering way beyond the expectations that we're wanting to achieve.

[124] **Joyce Watson:** Martin?

[125] **Mr Bishop:** Well, a similar approach. There is a vast amount of regulation, and I fail to see what's going to go into general binding rules that isn't already covered by the UK forestry standard, water and forestry guidelines, and 'Woodlands for Wales'. We have a vast amount of regulation that we already operate under, all of which has to be complied with if you get a management plan, felling licence or anything else. It may be that it's the monitoring of that that's the area that needs more work, rather than more rules.

[126] **Mick Antoniw:** Can you just clarify a bit more about general binding rules? I have to say I have great difficulty understanding what the difference is between a general binding rule and a rule, particularly when we're told that some of them are accompanied by sanctions. What is your understanding of what they actually are, how are they different from other rules, what do they seek to achieve, and in what way are they potentially beneficial or not beneficial?

[127] **Alun Ffred Jones:** Mick is a lawyer. [*Laughter.*]

[128] **Mr Bishop:** And I'm not, so if you can't understand it, we can't. I think it's another tier of rule making. Now, where do they fit with general advice, general binding rules or legislation? They all do the same thing and you're foolish to ignore any of them. It's perhaps more to do with how Governments introduced the rules. Is it easier to introduce a general binding rule than it is to introduce a piece of legislation? I see no difference. If something's best practice and best advice, as this is best practice, we can't go against it. So—

[129] **Mick Antoniw:** I'm no clearer. I don't know if you can help?

[130] **Ms Lewis-Davies:** My understanding is that a general binding rule sets out a prescription to undertake a certain activity. So, it can be any activity. It could be on how you manage a specific activity, perhaps to do with your oil storage or whatever. I'm just using any example there. It sets out a prescribed standard to which you must comply, and if you don't, there is a sanction, which is, I think, a fine, right? Again, I fail to see how this adds anything when we already have cross-compliance. We already have SSAFO, which are the silage, slurry and agricultural fuel oil regulations. We also have regulations governing pesticides and their disposal. We are extensively regulated. So, what they add, I'm not clear. I see the opportunity in working in partnership with industry, using your RDP as that lever to make things happen. There's the opportunity to go way beyond a baseline. Any regulation is a blunt instrument. The regulator will tell you themselves it is a blunt instrument and it delivers you a level. We need to go beyond that level, I would suggest. To go beyond that level, you will need to work in partnership with industry. We've got a golden opportunity in the RDP.

[131] **Mick Antoniw:** Okay, thank you. I'm not sure I'm any clearer, but I appreciate—

[132] **Alun Ffred Jones:** No, we won't pursue that. William, did you want to ask some questions on—

[133] **William Powell:** On commercial forestry. Absolutely. What do you think, Martin, is the best way forward in terms of improving water quality on a catchment scale basis?

10:30

[134] **Mr Bishop:** We are already improving water on a catchment basis. Many of the problems that have existed in the past are due to the forestry policies that were being actioned in the 1970s and 1980s. The UK forestry standard would no longer allow those sort of planting regimes. We now have to have mixed species. We now have to have a minimum of 20 per cent broadleaves and a minimum of 10 per cent open areas. All of these sorts of things are continuing to improve. I would, of course, advocate an increase in forestry area. Forests in general, even commercial forests as well as non-commercial forests, can play a huge role in water management. They slow up water—the debris that's on the ground that's created by forest management, by thinning trees. That's rough timber, I think they call it, or something like that. That prevents the fast flow off the ground. Forest soils will soak up water much faster, so I would advocate a greater role for commercial forestry, and commercial forestry tends to be done at scale. Small buffer zones are very good, but they are just that. If you have something that is on a much bigger scale, you'll get all of the rest of the benefits, but magnified.

[135] **William Powell:** Thank you. In their evidence to this committee, the Wye and Usk Foundation stated that, per hectare, commercial forestry accounted for a greater level of harm to water quality than was the case from agriculture. How would you react to those comments?

[136] **Mr Bishop:** I'd love to see the evidence for that. We produce 1.5 million cu m of timber in Wales every year, on a year-on-year basis. I'm sure I can find a few examples where things have not gone quite right because of adverse weather conditions and things like that,

but, frankly, if the industry was not pulling its weight, how on earth would we get that amount of timber without causing massive pollution everywhere? It's not realistic. I suppose, if I ask my members, I could probably find a few examples of them picking up litter after fishermen and other people, but I wouldn't cite that as being the norm.

[137] **Alun Ffred Jones:** Is the main problem during felling, because of the disruption and the ploughing up, and the water running off? Is that the main cause of pollution?

[138] **Mr Bishop:** Certainly, during the felling, there would be an increase because of that. It would also be an increase because you take away the ability of the crop to intercept the rain. The fact is that the trees soak up the water and stop the rain drain from coming through, so, if you remove that, you're bound to get something else, but this can be all managed out. We change ditch designs. I think they call them 'hockey-stick ditches' now, where the ditch goes straight into the river. If you create a hockey stick, it slows the water up and this sort of stuff. How you manage the site—where you put the brash from the trees, for instance—can help to slow the water. All of these things—this is management. This is forest management.

[139] **William Powell:** Particularly NRW, as a significant owner of the public forestry estate, obviously has a role to play here. In their evidence, they suggest that they've been upping their game in that respect. Do you see any evidence that they're showing a lead that can be picked up elsewhere within the sector?

[140] **Mr Bishop:** Yes, they are. Again, we conform to this and we've all conformed to UK forestry standard for a number of years and other certification schemes. NRW are, as we speak, developing a water management plan to be part of every management exercise on a forest. Whenever you go into a forest, there's what we call a pre-commencement meeting, where all the key partners get together—owners, managers, landowners, contractors, hauliers—to look at all the problems on the site and make sure that nothing untoward happens, so to address the problems before we start. NRW are now—I think it's the middle of this year or the end of this year—introducing a water management plan as a part of that process, so, in advance of a forest site even starting, there should be a plan on how to manage the water flow off that site. So, yes, they are very active in that. It will happen in the private sector. Inevitably, when things like that happen on NRW land, it will follow in the private sector. NRW, to be fair, are quite helpful, inasmuch as I've asked them, 'Can the private sector be part of that training programme?' and they've said 'yes', that they would open their training programme for their own staff to private sector individuals. So, we can benefit from that as well.

[141] **William Powell:** Do you think that there'd be some crossover with the Farming Connect programme that's been mentioned earlier, to spread that best practice across the whole of Wales?

[142] **Mr Bishop:** Historically, forestry hasn't participated too much in Farming Connect, but we aim to bring that—

[143] **William Powell:** And the organisation would ready, if asked to make a contribution?

[144] **Mr Bishop:** Yes. We would disseminate that out to all our members, and, in general to the forestry industry as a whole, not just to our members.

[145] **William Powell:** Finally, you said that the RDP schemes are obviously just at the launch phase at the moment. Are you optimistic that, if they're properly delivered, they've got a significant contribution to make in this respect?

[146] **Mr Bishop:** I hope so, but, as yet, we haven't seen the rules and the scoring systems

for woodland creation or woodland management. We've worked with Welsh Government on the Glastir woodland restoration schemes, so, hopefully, we can have the same influence on the woodland creation schemes.

[147] **William Powell:** I sense there's quite a job of work to do in communications to build the confidence and get the participation levels up.

[148] **Mr Bishop:** Very much so.

[149] **William Powell:** Thank you.

[150] **Alun Ffred Jones:** Russell, back to you.

[151] **Russell George:** Thank you, Chair. I wanted to ask Rachel about poultry units and pollution. We took some evidence from the Wye and Usk Foundation earlier and, in their evidence, they've suggested that poultry units are an increasing source of pollution, and that inefficient constraints are placed on the management of these units. That's what their evidence has said to us. So, I'd be interested in your wider views and your views on their comments, as well.

[152] **Ms Lewis-Davies:** Okay. Firstly, in terms of poultry, whether it be free-range egg production or broilers, there are an increasing number of units in certain parts of Wales, so they've been a very, very useful form of farm diversification—perhaps allowing a youngster to stay or come into the business at home. So, they've been very useful in that respect. It's quite patchy within Wales, but there are certain areas of Wales where there is a higher number. I've not read or seen any evidence in terms of the impact that Wye and Usk are referring to. I've not seen that evidence, I'm afraid. What I would say, from my limited knowledge, is that those units would be governed by IPPC, which is the regulation for integrated pollution prevention and control. My understanding of that reg—and I can certainly go away and look at this for you if it would help—is it is linked to the way that you manage your nutrients arising from that system. So, nutrient management planning is actively built in to that regulation. It's something I can go away and look at, if it would help.

[153] **Russell George:** Yes. Can I just ask: what's the relationship then in regards to regulating poultry units between the IPPC and Natural Resources Wales? I would've thought Natural Resources Wales would be the regulator.

[154] **Ms Lewis-Davies:** Yes, they are the regulator of IPPC. IPPC controls a range of areas from dust to ammonia, so it's quite broad ranging, but it applies to poultry and pig units, to my understanding. So, in my view, it would apply to these poultry units that are being referred to here. As I say, I've not seen the evidence of any detrimental impact, but I would say that they're invaluable in the rural economy in certain parts of Wales at the moment. Can I go beyond that and take the next step?

[155] **Russell George:** Yes, yes.

[156] **Ms Lewis-Davies:** So, we've got the regulation; let's have a look at that regulation, but then also look at the opportunities through the RDP to see if we can't work specifically with that group, with that sector, if there is evidence that we need to. I don't think that join-up has been made yet. I may be wrong, but there's an opportunity there through RDP, if there is an issue based on the evidence—I've not seen any evidence—to go beyond the regulation to see what is best practice. Again, this is where your applied research comes in, doesn't it? Is the research being done on the ground within Wales, outside of Wales, because it's a sector that's on the increase, to try and mitigate? Is there planting or are there any remedial actions that can be undertaken? Let's go out and do the research. Is there applied research taking

place? And then let's apply it through the Farming Connect route.

[157] **Russell George:** To me, clearly, if you've got a large-scale poultry unit, there's going to have to be a management plan, wouldn't there? The IPPC or NRW would require a management plan, so—

[158] **Ms Lewis-Davies:** A management plan and also a nutrient management plan. Remember, they've also been through the planning process, for which NRW, previously the Environment Agency, would have been a statutory consultee. So, as I'm saying, bring me the evidence. If the evidence is there, well, let's look at the solutions. I'm sure that, if there is the evidence, we've also got the regulation, and then let's go beyond that if we can.

[159] **Russell George:** All right. Well, one thing I was going to ask you was what the industry can do in this regard, but in one sense I suppose I'm thinking, 'Well, it's for the regulator to bring forward the regulation', and it's probably their role more than yours, but you would have an input into that, wouldn't you?

[160] **Ms Lewis-Davies:** Absolutely. In the first instance—. For example, NFU Cymru does have a poultry board, but nobody thus far has brought the evidence to us. So, bring the evidence and then we can—. I've not seen the evidence that's being referred to.

[161] **Mr Bishop:** Part of the roles of both our organisations in anything like this is to disseminate best practice out to the members. So, if we have evidence—. You know, if we haven't got evidence we can't disseminate that out to members. So, it's all very nice citing something, but if we haven't got access to it—. Just to sort of put it into context a little bit, there has been quite a large increase in these poultry houses, and part of that is driven by things external to Wales, which is the renewable heat initiative, which is obviously a Westminster initiative, that has enabled them to use wood-fired boilers and has actually made those units a little bit more profitable. Hence people have moved into them a little bit. I would have to say, from my point of view, it's put a great injection of capital into the rural economy by using lots of the wood that, actually, there wasn't a huge demand for in the past.

[162] **Russell George:** I know that Rachel wants to come back in as well, but can I just ask another question before you come back in? It's perhaps turning this around the other way, because I've had constituents contact me who are very keen to progress an application for a poultry unit or something, and what they've said is that there's too much regulation. So, in one sense—and I can see in your evidence that you talk about gold-plating and putting yourselves and the industry in Wales at a competitive disadvantage to EU counterparts—have you got comments on that because that's the other side of the discussion?

[163] **Ms Lewis-Davies:** Well, the point that I was trying to make, perhaps not very clearly, is that I've not seen the evidence, but the regulation does exist. They've also gone through a very detailed process to even get that unit established in the first place.

[164] **Russell George:** And this is, of course, with regard to water management. That's what we're talking about.

[165] **Ms Lewis-Davies:** Well, the integrated pollution prevention and control, I know, links to how you manage nutrients. The point that I wanted to make was on the management of those nutrients. Those nutrients—. Poultry manure is not waste: it is a valuable, valuable fertiliser. It is not in the interests of any agricultural business to waste it. So, I think, you know, we need to be clear on that. Those businesses will be using that as efficiently as possible.

[166] **Alun Ffred Jones:** Can I just, in conclusion, more or less, unless Members have

other questions—? In terms of the water framework directive, Wales is not performing very well. Only 50 per cent of the—. The target of 100 per cent by 2015 meeting the good ecological status is simply not being achieved and will not be achieved. In fact, we seem to be lagging behind. So, in terms of your areas of interest, what do you think is the secret to improvement, and do you see your areas of interest actually playing a very important part in delivering the objectives?

[167] **Ms Lewis-Davies:** Use the tools in the box to the best possible effect. The main things you can do: control of invasive species, which we've not talked about today—they die down in the winter, they leave soil banks exposed, they're on the borders of these streams and corridors, and that adds to the problem—riparian habitats, establishment of those and corridors through fencing off streams, and then investment in infrastructure. That means slurry and silage storage, clean/dirty water systems on-farm. The tools in the box are there to do it. In NRW you need a field force. We've got Farming Connect; that needs to be used in the catchments where you can deliver the greatest gain. The SPG—sustainable production grant—that's your investment in infrastructure, and, remember, farmers are putting 60 per cent into that. Make it as easy as possible. Remember that some of these investments have not taken place because of market failure—they're an environmental good. We're not being rewarded in the market for making those investments. Then, finally, that small grants scheme, or that Glastir scheme, has the potential to deliver this action on the ground that we need. It's about co-ordinating or marshalling all those efforts.

[168] **Alun Ffred Jones:** That's a very good summary. Martin.

10:45

[169] **Mr Bishop:** Again, I will advocate the expansion of woodland in Wales. We have the 100,000 hectare target that the Welsh Government has and we've failed miserably on that, so I think we need to influence the Glastir programme, going forward, and the RDP programme, to get more woodlands—not just commercial woodlands, but small woodlands, farm woodlands and all sorts of stuff; just get more trees in the ground.

[170] **Alun Ffred Jones:** Iawn. A yw pawb **Alun Ffred Jones:** Is everyone happy? yn hapus? Ocê. Okay.

[171] Thank you very much for coming in this morning, it's been very valuable. Thank you for your contributions. Diolch yn fawr iawn.

[172] **Mr Bishop:** Shall I leave that leaflet?

[173] **Alun Ffred Jones:** Yes, leave that there. Thank you very much. We'll take a short break now and we'll come back just a few minutes before 11.00 a.m. to sort out questions for the next set of witnesses.

*Gohiriwyd y cyfarfod rhwng 10:45 ac 11:00.
Meeting adjourned between 10:45 and 11:00.*

Ansawdd Dŵr—Grŵp Trafod Water Quality—Round Table Discussion

[174] **Alun Ffred Jones:** Good morning. I reconvene the committee officially, and welcome to Mr Tony Harrington. Perhaps you could introduce yourself and your position for the record.

[175] **Mr Harrington:** Yes. Good morning, everybody. I'm Tony Harrington, director of environment at Dŵr Cymru Welsh Water. I have a wide-ranging role in the business. Most people will probably regard the sort of thing I do as being chief scientist, if that helps in regard to any of the questions. I'm very happy to answer questions on general binding rules, on poultry farms and the pollution that they cause, on our coastal investments, and on the £1 million a day that we spend on improving services to customers and cleaning up the environment.

[176] **Alun Ffred Jones:** Right, well we'll kick off with—and this is not an inquiry, of course, it's a round-table discussion. I should have made that clear. Jeff Cuthbert, you can kick off, and we'll get on to general rules in a minute.

[177] **Jeff Cuthbert:** Thank you very much, Chair, and good morning. In order to open the discussion, could I ask you to say whether you feel confident that the obligations under the new water framework directive will be met? What do you think might be the biggest barriers to meeting those obligations? We know that you have concerns that some of the more difficult and expensive problems could be stored up for the final cycle. Do you still have that view, and, if so, have you discussed this with the Welsh Government and Natural Resources Wales?

[178] **Mr Harrington:** Okay, thank you.

[179] **Alun Ffred Jones:** So, three questions there for you.

[180] **Mr Harrington:** Am I confident? I think that the water framework directive presents a huge challenge for all of the European Community, not just for Wales. Here in Wales we're doing—

[181] **Alun Ffred Jones:** Can I interrupt you there? Where are we in terms of, you know, the league table?

[182] **Mr Harrington:** We're a mid-pack performer. Wales is better than many other parts of the United Kingdom, so we do okay when we're benchmarked against England, in particular, but I was in a meeting over in Brussels in March where we looked at the scores on the doors, really, for all of the various member states, and the United Kingdom is a mid-pack performer. We're considerably better than places like Cyprus and Malta, but we're not anywhere near as good as some of the leading countries, like Romania, who are at 80 per cent plus good status. So, we have a long way to go.

[183] **Alun Ffred Jones:** So, you're back to Jeff's questions.

[184] **Mr Harrington:** So, in answering your question, 'Am I confident?', I'm confident that we'll be compliant with the directive by 2027, the end of the third cycle, but I think we're going to have to look at the standards that are being set and come up with a number of alternative local standards, because some of the challenges, particularly around nutrients in our rivers, both from a phosphate and from a nitrate point of view, are going to be very, very difficult and challenging for the farming community to deal with.

[185] I think the point-source pollution and abstraction issues will all be dealt with shortly, really. We certainly as a water company have agreed plans with NRW and, in England, the Environment Agency for the parts of England that we serve, to deal with our impacts, and I think those will largely be delivered by 2020. I think that the diffuse pollution challenges, as outlined quite correctly in the Welsh Government's water strategy, are very, very difficult and challenging to meet without having a severe impact on all of those sectors: farming, forestry, mining and so on. Some of them will be very expensive and some of them are technically very challenging to deliver.

[186] So, we've certainly got a very busy 12 years ahead of us in the second and third cycle of the WFD. We as a company will be investing tens of millions of pounds in the remaining work that we need to do. We're very keen to partner with all of the organisations that have been represented here today, as well as Welsh Government and NRW—so much so that, as an example of which, I've put in the report what we're doing on the coast. So, historically, water companies, and Dŵr Cymru, have built computer models of the environment to help us design and manage our infrastructure. The regulators have also built a number of models, often of exactly the same areas. We get our consultants to discuss amongst themselves which model is the best model; that takes some time and it's also very expensive and inefficient for Wales. So, what I've decided to do is I've agreed with NRW that we will build the coastal models, and we'll give those models both to academia in Wales to further enhance and support our universities, but also we'll give them to Natural Resources Wales and to third parties for their use, so that we only actually have one master set of models that we can all use and all update, and collectively work in partnership to support the best possible modelling, and that modelling produces the evidence that helps Ministers with policy decisions and it helps me design infrastructure that we can implement on behalf of our customers, which, in that case, is for the protection of bathing waters and shellfish waters as well as the coastal water framework directive standards that we need to meet.

[187] Equally, NRW are lending us all of their river system and land run-off models, which we've now obtained, and we're working very much in partnership, doing modelling together so that we only do the modelling once. We do it to an agreed set of specifications, and then we all agree with the outputs of the models, which help us deliver whatever scheme it happens to be, whether it's a water abstraction one, or a sewage treatment works treatment-type solution. So, I'm very confident that—. In fact, the thing that drew me to work in Wales—because I've only been at Dŵr Cymru for three years; I was a director at the Department for Environment, Food and Rural Affairs before—was that, in Wales, we have the right size of community that I think really can do business. Stephen mentioned in his evidence that it's really quite straightforward to go to the right person in Wales, build the relationship and get stuff done. I found in England, and when I worked in a more European context, that it's actually quite tricky just to find the right people and get through the committees and the various barriers that exist. Those barriers don't exist in Wales, really. It's a much more collegiate working environment. The water framework directive sets out almost a requirement to work that way, which lends itself to Wales and the smaller nation states in the European community to actually deliver stuff, because we do know one another and we know who needs to do what, and so on and so forth. There are some issues around funding, for sure, and, in WFD terms, some of that funding falls to Welsh Government to fund, and I think with the cuts and the efficiencies—the never-ending efficiencies that are required of Governments—Governments are going to struggle to afford to deal with some of the mining legacy issues in particular and also some of the other issues that need to be dealt with through Glastir or whatever economic instruments we use to encourage better farming practices.

[188] **Alun Ffred Jones:** Can you explain the mining legacies, as you call them? What is the pollution that comes from mines?

[189] **Mr Harrington:** It's mostly groundwaters that arrive at the surface or are pumped out of mines, and those waters contain a variety of metals in particular—metals like cadmium, which are extremely toxic to various ecosystems. There are very specific standards in the water framework directive, water quality standards, for those types of metals that have to be met. If you're going to continue to pump, or even if you don't need to pump, if the water arises out of mining adits, and so forth, into watercourses, they will cause a failure of the water framework directive.

[190] **Alun Ffred Jones:** Thank you. Jeff, do you want to come back?

[191] **Jeff Cuthbert:** Yes, on that very point. According to one of the bar charts we have, it shows abandoned mines—and, indeed, I dare say existing metalliferous mining as well as coal—as being the No. 1 cause of poorer water quality. Another bar chart shows it as about No. 3 or No. 4, but it's quite a high factor in Wales. Is that generally spread across Wales, or is it focused on the former mining areas, where one might expect to see it, of south-east Wales and parts of north-east Wales?

[192] **Mr Harrington:** My understanding is that it's focused around those that were previously heavily mined. There are perfectly engineerable solutions that can be put in place and, indeed, the Coal Authority have been putting those solutions into place in Wales. There are very good examples of reed bed-type technologies that have been implemented in Wales that largely deal with the polluting effects of mines, but those have got to be paid for and, with money in short supply, that presents a barrier to the implementation of those types of solutions.

[193] **Jeff Cuthbert:** Okay, thank you.

[194] **Alun Ffred Jones:** Right, who's going next? Mick Antoniwi, are you—

[195] **Mick Antoniwi:** I'm happy to ask it now.

[196] Our previous contributors to these round-tables have referred to this concept of general binding rules, and some have suggested they work well within Scotland, within certain parameters, although there seems to be confusion as to precisely what they are.

[197] **Mr Harrington:** Okay. Let me try to clear that up for you.

[198] **Mick Antoniwi:** And what they might do, how they fit into the regulatory regime, and whether it's just a name for another rule system.

[199] **Mr Harrington:** Okay. General binding rules are a concept, really. There is an awful lot of regulation about, and general binding rules in many ways should only catalogue and describe either existing regulation or fill gaps in regulation. With regard to the earlier discussions around the expansion of the chicken industry, IPPC doesn't cover those chicken sheds because they're too small; they come under the IPPC thresholds. That leaves a gap, effectively, in regulatory control for some specific areas; septic tanks is another area where there isn't really a proper regulatory floor, if I can call it that, that sets the minimum standards you would expect for the management of, say, a septic tank.

[200] So, one of the general binding rules we're hoping is applied in Wales is for the control of pollution arising from septic tanks. It's very specific. It would tell the owner of a septic tank how frequently it needs to be emptied, for instance—that it needs to be emptied by a competent and licensed waste carrier in the knowledge that that waste will then be properly disposed of and not just discharged into a stream or onto a farmer's field somewhere, for instance. And there would be penalties arising if that general binding rule wasn't followed.

[201] So, I think they're a very useful tool in the armoury of regulators to complement and simplify, hopefully, some of the plethora of regulation that does exist as a vehicle, if you like—a de-red-taping vehicle—that can take some of the very complex regulatory challenges that face land managers and say in quite simple terms, 'Look, if you have a septic tank, you need to do this; if you pesticides, you need to this; if you manage woodland for a certain period of time, you need to act in this way with the use of chemicals and fertilisers', and so on and so forth. They should very simply set out the best practice arrangements that are actually documented in lots of different places, and it was held up in the woodland examples, and so

on.

[202] So, it's not about more regulation. In certain specific areas it might be, but, generally, it's about just crystallising very clearly and very simply what regulations do apply and then what sanctions would apply if those are not followed. And the reason I'm supportive of the use of general binding rules is because, if you look at the evidence over the last 25 years, and specifically the last six years when the water framework directive has been applied, the regulated activities that take water out of the environment and put effluence into the environment has been transformed. I think of when I used to swim in the sea and there was no sewage treatment at all. Now, we've got some of the finest bathing water quality, certainly in the United Kingdom, and stuff to be proud of at a European level. And that's largely because companies like mine have invested £1 billion. Well, if you invest £1 billion and if we didn't get the bathing water quality that we have got, one could ask what we have been doing. So, we've invested huge amounts of money in a very clear regulated framework and in an environment that sets out that framework very clearly. We know exactly what we need to do, by when and how, and, unsurprisingly, we've had all sorts of substantive benefits that arise to the environment.

[203] That clarity doesn't really exist in some of the diffuse pollution challenges, and I hope that general binding rules in a very simple, clear way can gather together the existing regulations that exist, but also fill a couple of gaps that are urgently needed so that we can talk then, through partnership working with Stephen's group—the Wye and Usk Partnership—with whom we actively partner, and the other river trusts, and so forth, the third sector and the Groundwork trust. There are lots of third sector organisations that are very, very successful at engaging local communities and getting local communities to rise up in action with enthusiasm, and very cost-effectively from my company's point of view, I might add, and then deliver some of the solutions that are required under the water framework directive. But, they do need that regulatory floor to be set.

[204] Regarding your question earlier around pay for ecosystem services, one of the reasons we haven't seen pay for ecosystem services take off in the way that we would like is because the regulatory floor doesn't exist. You've got to set very clear distinctions about what is actually required of a land manager in a polluter pays-type principled way. And then, above that, a marketplace where PES can work quite effectively, but we haven't seen the framework for the marketplace yet from Welsh Government; I know Matthew Quinn is working on that. And we also haven't seen how they're going to set the regulatory floor. And every single environmental non-governmental organisation I've spoken to has talked about the importance of not diluting the polluter-pays principle, and you have to set very clear, simple regulatory floor for a particular activity.

11:15

[205] What is de minimis? What do we require of land managers to actually do, and how will that be enforced, because enforcement is critical? If you're not going to enforce any of this, then, you know, a lot of people are just going to ignore it. So, enforcement, along with very clear rules, is critical, and then, above that, a marketplace for PES, I'm sure, will take place and all sorts of benefits will arise. Does that answer your question?

[206] **Mick Antoniw:** Yes. So, you take existing rules, but you tailor the specific requirements to the circumstances you want to deal with.

[207] **Mr Harrington:** Yes.

[208] **Mick Antoniw:** So, it's not creating new rules, but it's basically saying, 'What these mean in these circumstances is'; that's very useful.

[209] **Mr Harrington:** That's right. With septic tanks for instance, you'd have a very small leaflet and you'd give it to the householder who has a septic tank. It would be very clear what the householder needs to do, what their responsible for and the sanctions that will be enforced if they choose not to do that.

[210] **Alun Ffred Jones:** Thank you very much; you've made one man very happy.

[211] **Mick Antoniw:** You've made me very happy today, yes. [*Laughter.*]

[212] **Alun Ffred Jones:** Janet, do you want to come in on this?

[213] **Janet Haworth:** Yes, I'd like to follow on with the septic tanks actually. I totally agree with you that there are still myths out there that you throw a dead cat in there or something and, once you've set it up, you forget it, which is, as you well know, ridiculous, isn't it? I think a nice clear leaflet, which says, 'This thing fills up; it needs emptying and if you don't, this is what's going to happen to you' is to be welcomed. But I wanted to ask you also about archaic cesspits, which are out there. To what extent is that a problem? I know I've got a problem on the Great Orme with one, but I wonder how that is replicated across north Wales and whether we need to be thinking about archaic cesspits, as well as the more modern version, which is the septic tank. Of course, the myths around the old cesspit are even more of the dead-cat sort of scenario.

[214] **Alun Ffred Jones:** I'm not sure where the dead cat has come into this, but— [*Laughter.*]

[215] **Mr Harrington:** There are all sorts of myths about how to manage, or not manage, I should say, such facilities. We don't get a huge amount of customer contact about cesspits; we do about septic tanks, but not about cesspits. So, I don't think they're a huge issue, although, locally, of course, they might be, both from an odour point of view, from a public health point of view and from a water quality point of view, whether it's groundwater quality or surface water quality, they might be very important indeed. And it's the sort of thing that I think NRW locally should be picking up, because they are the regulator and they have all the skills and wherewithal to be able to advise the septic tank owner about whether they should be considering a section 101 notice and get onto the mains sewerage system or whether they should be just simply managing the septic tank in a more effective way, because both septic tanks and cesspit, if they're managed well, are a perfectly satisfactory way of dealing with domestic sewage. It's where they're not managed well that they cause problems for odour, public health and water quality. And it's all about the management of the asset really; if you manage those sorts of assets well and have them emptied regularly and so on and so forth—you might even choose to do some simple environmental monitoring and look at sewage fungus, for instance, that might be near where the overflow is—these assets can last a very long time and be completely fit for purpose. But it's very site specific—you've got to look very site specifically at the individual cesspit in question.

[216] **Alun Ffred Jones:** Russell George.

[217] **Russell George:** No, I'm all right.

[218] **Alun Ffred Jones:** You're all right. Joyce.

[219] **Joyce Watson:** You did talk about your programme of scientific investigation on coastal areas. Do you want to give a little bit more detail about what that means?

[220] **Mr Harrington:** Yes, of course. Historically, Dŵr Cymru and, indeed, the water industry as a whole, has relied quite heavily on its regulators to undertake science and

research and to set regulatory standards. Before I worked at Dŵr Cymru and DEFRA, I looked after the environment tender at Yorkshire Water and at South West Water before that. My experience of policy setting and setting new standards, particularly at the European level, is quite mixed; that's probably the most polite thing I can say about it. We have a number of standards, which are not particularly well founded in science. And, so, when I came to Dŵr Cymru, in discussions with the board and so forth, we decided to take quite a significant proportion of the money we receive from our customers and we are undertaking the largest science programme in the history of my company. That evidence will be provided to regulators and to Welsh Government Ministers to help Ministers make ever-better decisions in terms of the sort of regulatory standards that we need to achieve, but also to help the company make much better investment decisions, so that every penny that we spend of our customers' money is focused at maximising the value that we get from that. Stephen mentioned the partnership that we've had with them on the Wye and Usk, looking at that particular environment. We spent about £1.6 million of our customers' money; in fact, I've provided some leaflets to you in the little handouts that I've circulated. There's one in there that deals with some of the innovation and science work that we've been doing over the last 12 months.

[221] The Wye and Usk project is a good example of where a fairly precautionary approach had been taken by the regulators, quite rightly in many ways, due to the lack of evidence that was available to help them with their decisions. So, we've been providing the science and the evidence to help make better decisions and to come to a very collegiate position with the Wye and Usk regulators, the Canal and River Trust, the Environment Agency, NRW, and so on, as to what the best possible outcome for those two rivers are in terms of the way we manage our reservoirs and the water releases that we make from the head of the reservoirs on behalf of migratory fish and the ecology and so forth.

[222] **Alun Ffred Jones:** The scientific work you've carrying out is looking at the quality of the water—

[223] **Mr Harrington:** The quality of the water, but specifically the interaction between the quality of the water and the ecosystems—aquatic biodiversity, effectively—in those two rivers and a number of other rivers, and the coastline as well for Wales. All of those data will be made available, or are being made available to academia and third parties. We'll be putting it onto Welsh Government's new geo-hub, which is the data warehouse, for want of a better expression—

[224] **Alun Ffred Jones:** When will this be available?

[225] **Mr Harrington:** I think the geo-hub's being built at the moment. It should be coming available within the next few months, as I understand it. That's a Welsh Government project. It's something we asked for some months ago. The Welsh Government have responded very positively to that request from both ourselves and other stakeholders. We felt it would be very useful to have a single place where environment data could be held and all sorts of people could then access the data. It's much more efficient in terms of gathering and monitoring data because we do monitoring, and I'm sure that NRW does, and as the third sector organisations, the Canal and River Trust and so forth do. If we all have access to everyone's data, we can make much more informed decisions around the application of those data.

[226] **Alun Ffred Jones:** You said we were behind the curve compared with the best in Europe in terms of water quality. Is this because of specific problems in specific areas, or is it a general problem across Wales?

[227] **Mr Harrington:** I think from a point source regulatory point of view, we're probably ahead of many other points in Europe—certainly as good as anyone else. But it's in the

control of diffuse pollution where I think we have really struggled, whether it's diffuse pollution from farming, from land management, forestry, mining, and even the urban diffuse pollution that occurs, with missed connections to surface water systems and so on. That's where we're behind the drag curve, I would suggest.

[228] **Joyce Watson:** In terms of diffuse pollution, one of the big projects that you've been involved in is the RainScape. It's a real interest area for me. So, are you helping to advise, because planning very much comes to the fore?

[229] **Mr Harrington:** Yes, it does.

[230] **Joyce Watson:** And permeable surfaces, which is a bit of a hobby-horse—are you having successful conversations, do you think, with Government with permitting planning and permitting bodies around that particular issue, linking it up with—we had forestry here earlier on—the wider aspects and benefits that can be arrived at from dealing with just surface water?

[231] **Mr Harrington:** We have very productive relationships with our planners. The ownership and responsibility landscape for urban drainage is very complicated. As a result of that, at the end of last year, I agreed to lead the UK water sector programme board, called 'Delivering twenty-first century drainage for our customers', which all of the water companies are involved with, including Northern Ireland Water, Scotland, and, obviously, Welsh Government and NRW are heavily involved, because some of these issues need to be cleared up nationally. The complexity of ownership arrangements, particularly around urban drainage, is one of the stumbling blocks that has got in the way of progressing more sustainable and resilient urban drainage arrangements in the United Kingdom. So, there are some issues that we'll deal with nationally. At a local level, as I hope you're aware, we are just getting on with it, and we are implementing sustainable urban drainage on a wide scale during this investment period. We call it AMP6; it's the sixth asset management plan—AMP6. Llanelli and Grangetown are leading the way in terms of those, but there are many other sites where we'll be implementing sustainable urban drainage to take rainwater out of our sewerage systems to reduce the frequency of overflows of the sewerage systems, which have a direct effect on water quality, and in particular, in some cases, bathing waters and shellfish water quality, but also—

[232] **Alun Ffred Jones:** I hope you'll be adding Llanberis to that list.

[233] **Mr Harrington:** Indeed. Thank you for reminding me. And Inland lakes as well. So, we have a wide-scale programme of investment. Once some of the national issues have been dealt with, and I'm in detailed discussions with Welsh Government officers as well as to whether we can fast-track those in Wales, in response to the very clear position that's been taken in what I think is a very useful water strategy, which has been published. So, we might be able to fast-track and get there first in Wales. We do need to look at the ownership and regulatory arrangements for all of the urban drainage, where local authorities fit in with us, with privately owned systems, with NRW itself. It's a very complex area, and the law, unfortunately, is not particularly clear or helpful in that regard either. It's an area that could really do with review.

[234] **Joyce Watson:** Can I—?

[235] **Alun Ffred Jones:** Yes.

[236] **Joyce Watson:** I understand all of what you've said, but prevention is always better than cure. If we're looking at prevention, the construction industry would play a key part in that. So, how are we going to—in terms of improving water quality by not letting the

pollutants into the water in the first place—talk to and convince and take on board with us that industry? Have you had any conversations with the industry? Again, they're the key players and they're saying that, in terms of marrying it all up, it might be too onerous, and they might not bother to build here; they might go and build elsewhere.

[237] **Mr Harrington:** I think that's why it needs to be dealt with at a UK level and not at a local planning authority level. Certainly, Water UK, which is the trade association for the water industry, has had those discussions, and that's exactly the feedback we've had about the fact that building in a more sustainable and resilient manner will cost more money. I think that's then a societal decision that we have to make. We either are going to do what it says in the Environment (Wales) Bill, and put sustainability at the heart of our decision making here in Wales, or we're not. And, if we do do that, as I hope we will do, then we will need to build structures that are more sustainable. It doesn't necessarily always mean they're more expensive; it might mean they're more expensive to start with until the industry gets used to it and we find more clever, cheaper, more efficient ways of delivering those sorts of solutions. But, from a sewerage undertaker's point of view, we're very, very keen to promote sustainable urban drainage in our RainScape programme, because we believe that it's the only really sustainable way to move our rather aged, dendritic drainage systems into a position where they do actually protect adequately water quality interests, interests of the environment, and also reduces urban flooding. Flooding is one of the most awful things that a water company does to a private householder. If your house is flooded with sewage, it's a pretty awful thing to happen to you. RainScape is all part of the whole re-engineering of that urban drainage landscape, so that we do that less frequently than we currently do.

[238] **Alun Ffred Jones:** Quite a lot of people want to come in: Russell to begin with, Janet and then Jeff.

[239] **Russell George:** It was on a new subject.

[240] **Alun Ffred Jones:** Anybody want to stay on the same—? Jeff.

[241] **Jeff Cuthbert:** On the point that you've just made about sustainability—. I do think that RainScape is a good example of the provisions of the Well-being of Future Generations (Wales) Act 2015 actually being put into practice, but do you think—and you referred to the Environment (Wales Bill)—that there is any contradiction in terms of this matter—that is, the quality of water—between the provisions of the Environment (Wales) Bill, as it's currently written, and, indeed, the Well-being of Future Generations (Wales) Act in terms of sustainable development?

11:30

[242] **Mr Harrington:** I'm not aware of any. If anything, I think that they complement one another quite well. It'll all have to be paid for, though. I think what will be the biggest issue of dialogue between the building industry, ourselves, yourselves, and so on, is how we are going to afford it.

[243] **Jeff Cuthbert:** Okay; thank you.

[244] **Alun Ffred Jones:** Russell.

[245] **Russell George:** In your opening comments, you mentioned that you had some comments on poultry units and water pollution, and I wanted to give you that opportunity. You've been listening to our evidence and you wanted to comment, I think, on what had been said.

[246] **Mr Harrington:** Oh, yes. Thank you. The evidence that I've seen from the Wye and Usk is very compelling. Some of the poultry sheds are built in the wrong place. They're far too near a watercourse and it's far too easy, when the poultry are being cleaned out and jet washed and so forth, for that effluent—which, I think, is the right word—to get washed into—

[247] **Russell George:** How is that allowed, then, in planning terms?

[248] **Mr Harrington:** Well, I think that planners have taken a view that this is a matter for NRW and NRW have probably taken the view that it's a matter for the planners. I think that it's one of those things that tends to fall between stools of responsibility, but the evidence is compelling, as the Wye and Usk have shown me, where little brooks and streams have literally run white with the amount of pollution that's been washed from the chicken sheds into the watercourses. Phosphate pollution in our watercourses is the No. 1 challenge for both my company and for farming, in my view, and it's about management again. So, again, in this particular case, you'd have a general binding rule—because they're not covered by the IPPC, as I understand it—that would set out very clearly how the manure is to be managed, what you can and can't do, and what the sanctions are if you get it wrong—nice, clear guidance for that particular sector, but it has to be enforced. If you're not going to follow it up with appropriate enforcement action, it's largely a worthless exercise, and that's what I haven't seen, really, in Wales. I haven't seen the enforcement of existing regulations, and what that means is that the environmental non-governmental organisations then ask for more regulation, because they don't think that the existing regulations are good enough, and if the new regulations don't work, well, they ask for yet more regulations. Actually, what we really want is a simplification of the regulatory regime to be enforced. That's what people really want.

[249] **Russell George:** You said that you'd seen the evidence that the Wye and Usk has produced.

[250] **Mr Harrington:** I've seen the evidence.

[251] **Russell George:** We must get that from them, because I'd pass that to Rachel, who was asking for that evidence.

[252] **Mr Harrington:** Yes.

[253] **Russell George:** But, I mean, it's astonishing that you say that it's been built in the wrong place and neither NRW nor planning seem to take responsibility.

[254] **Mr Harrington:** I'm not saying that it's built in the wrong place. It might be 10m or so—. If you build a facility right next to a watercourse, when you're cleaning that facility out, it's very easy for the liquid to run into the watercourse. If you build with just 10m or 20m, like a buffer-strip-type approach, between where the polluting activity is—whether it's the application of pesticides or chicken sheds—and the watercourse, and you've fenced appropriately the watercourse so that animals don't also make their way into the watercourse—. Some of the solutions, actually, for dealing with water-quality issues we have are really very simple. They will cost money, and we need to align correctly the current economic incentives that farmers have, whether it's through Glastir or the various rural development plan-type payments—. We need to have a much better alignment between those financial incentives and the water quality consequences of bad management, because I don't think that's done anywhere near as well as it could be, but, that apart, in planning terms, if they were built in the right place and they were managed in the right way, there probably wouldn't be much of a problem.

[255] **Russell George:** So, how many would you say—?

[256] **Mr Harrington:** I've only seen the evidence that Wye and Usk has produced.

[257] **Russell George:** And for those areas where those units have been built in the wrong place—are they at risk, currently, or is it being dealt with?

[258] **Mr Harrington:** I think if you just managed the units differently, you'd probably overcome nearly all of the polluting effects of the activity.

[259] **Russell George:** But if it was managed correctly, then it wouldn't matter where it's built, as long as it's managed correctly.

[260] **Mr Harrington:** Yes. I just think that it's easier to manage if you're slightly further away from a watercourse.

[261] **Alun Ffred Jones:** Okay. Good. Janet, did you want to come in on this?

[262] **Janet Haworth:** Yes. I'll sort of roll it into the question that I was looking at as well on SuDS. I think you're quite right about the complexity of some of the legal wrangles that happen when you start dealing with these things, and I think you're quite right in suggesting that it needs to go up a gear and be taken on board nationally, so that we can cut through this. Otherwise, we get involved in very localised arguments, going back to the cesspit that is causing me problems at the moment. Whose is it? When did the land ownership change? Who put an extra pipe into it? 'Oh, we can't do anything till we sort these things out'. That sort of thing has to be cut through, and we need to focus on what we need to sort out. So, we need to get it sorted.

[263] I think it also comes down a level then to local government planning. I've sat on planning committees, and only recently have I managed to insist, when a new development has been coming in, talking about 40 units or 70 units, that we need some information from your organisation, that we need to know what the impact of this is on our existing drainage structures to avoid the sorts of problems you were describing happening later. I would like to see that as something that has to happen every time these decisions are taken to a planning committee—they have to consult; they have to look at what the implications are for the drainage system. As you rightly point out, it's ageing. We frankly don't even know—

[264] **Alun Ffred Jones:** I'm sorry to interrupt your flow. The question is—

[265] **Janet Haworth:** Well, the question is: I think, one, we do need that tackling of the legal things at a higher level, and we do need, I think, to work with planning, and I think there's perhaps also—. Do you think there's a role for Welsh Government to get involved in promoting, through the universities, some technological developments that you were talking about to create in Wales a sense that we are the place of best practice for managing and producing quality water?

[266] **Mr Harrington:** Okay. The first point I'll make is that Dŵr Cymru is not a statutory consultee under planning for all sorts of historical reasons, which is unfortunate and something that Welsh Government could choose to change—

[267] **William Powell:** It has done, I believe, Chair, in the planning Bill. I believe that was an amendment I was involved in bringing forward.

[268] **Mr Harrington:** I don't think it's—. It's not yet law.

[269] **William Powell:** No, not yet. No, absolutely.

[270] **Mr Harrington:** So, once we are a statutory consultee under planning, I think that some of those issues will be dealt with. We're very pro-development wherever we can be, but, you're quite right, some of our aged systems do constrain development and those are the areas where we need to look at releasing capacity, and one of the ways of doing that is through the RainScape scheme because, where you can take rainwater out, you can allow foul flows in, really. So, there are lots of benefits associated with RainScape that directly benefit the society and economy of the region in which the RainScape scheme is being implemented.

[271] In terms of getting involved more closely with the universities here in Wales, we are doing all sorts of research with the universities in Wales. I think the technical design and implementation and practical maintenance issues around sustainable urban drainage are now largely dealt with. One could argue, in one of the work streams in my programme board in the UK, to write those down, so that we effectively crystallise the best practice so that everyone can share it. I don't think it's particularly codified in a central place where people can go to it, so that does need to be done. But I don't think we need further research, for instance, specifically around how effective different types will be, because that will come out of the implementation and monitoring there we're going to do anyway. So, no, I wouldn't have thought that a closer liaison on SUDS with the universities is required. I can think of umpteen other things I'd like to talk to Welsh universities about doing research on. I'm a member of one of the Engineering and Physical Sciences Research Council boards that allocates funding to doctorates at Cardiff University, and we certainly can tap into available research funding from the Natural Environment Research Council and EPSRC to bring that money into Wales and foster a greater spirit of excellence amongst the doctorate—

[272] **Alun Ffred Jones:** Well, we're running out of time. William Powell, do you have a—

[273] **William Powell:** Yes, Chair. There was one question I had and that was around what discussions Dŵr Cymru has had with Welsh Government and NRW concerning the potential unaffordability of the next phase of the investment in dealing with the sort of final water framework directive cycle and whether, potentially, there is a role for innovative funding, such as, potentially, the European Investment Bank or some other source to actually plug that gap.

[274] **Mr Harrington:** As part of the whole water framework directive consultation exercise that's managed by NRW in Wales and the Environment Agency in England, we've been deeply involved in the basin panels—there are three basin panels that apply to Wales—and one of the topics that has regularly come up is, 'How are the different sectors going to afford what is required of them?' We're at a point now where we need to evidence that discussion and the different sectors involved, so, not just the water sector, but farming and so forth, need to step into that space more and actually provide costs and social and environmental evidence to help the Minister at the end of the first cycle, and indeed during the second cycle, to make better decisions, and this is what I was talking about earlier.

[275] We'll do some of the science, certainly, and I'm sure NRW will be doing lots of the science, as well. But all of the sectors involved need to put some skin in the game and that may take the form of research, it may take the form of data gathering and presenting evidence and so forth, but we do, really urgently, now need to understand the social, environmental and economic consequences of the directive, so that we can make very quickly the sorts of decisions I've asked for in the paper about any alternative standards that we want to apply here in Wales. The sooner we do that, the greater the chance of us not making any abortive investments for our customers. So, that's something I would really urge the committee to do: to encourage all of the sectors to become much more involved, including local authorities, which have a major role to play in the water framework directive and do struggle, I have to

say, to engage.

[276] **Alun Ffred Jones:** Okay, well, thank you very much.

[277] **Janet Haworth:** Can I just ask one supplementary?

[278] **Alun Ffred Jones:** Well, we're running very short of time. We have another evidence session—

[279] **Janet Haworth:** Two seconds.

[280] It's just to ask you: do you also have evidence of the cost of not doing these things when you have been involved in localities where there has been flooding due to the rainwater filling up in the drains?

[281] **Mr Harrington:** We certainly do economic appraisals that are pertinent to our own activities, whether it's flooding or the environmental consequences of pollution incidents, and so forth. But it's not a particularly well-understood science, and certainly, when you look at some of the diffuse pollution and impacts of mining, forestry and farming and so forth, it is extremely difficult to assign, with any kind of credibility, a very clear economic set of consequences that arise. It's one area of science that is full of opinion and not particularly well evidenced, in my view.

[282] **Alun Ffred Jones:** That'll do for us; opinions without evidence is fine to a point.

[283] **Mr Harrington:** Okay.

[284] **Alun Ffred Jones:** Can I thank you again, Mr Harrington, for coming and for a very informative session?

[285] **Mr Harrington:** My pleasure.

[286] **Alun Ffred Jones:** Diolch yn fawr iawn. Thank you.

[287] **Mr Harrington:** Thanks very much, everyone.

11:42

Trafodaeth Grŵp ar Ansawdd Dŵr Water Quality Round Table Discussion

[288] **Alun Ffred Jones:** We move swiftly on to our last session, item 5, with evidence from NRW.

<p>[289] Bore da. A gaf eich croesawu chi i'r sesiwn yma o drafodaeth ar y gyfarwyddeb fframwaith Ewropeaidd ar ddŵr a lle mae Cymru arni? A fydddech chi'n cyflwyno'ch hunain i ni gan nodi eich cyfrifoldebau o fewn eich sefydliad, os gwelwch yn dda, gan ddechrau efo Robert?</p>	<p>Good morning. May I welcome you here to this round table discussion on the European water framework directive and Wales's role in that? Could you introduce yourselves for the record and tell us what your roles are within your organisation, please, starting with Robert?</p>
--	--

[290] **Mr Vaughan:** Good morning, everyone. My name's Bob Vaughan. I work for Natural Resources Wales looking after sustainable land management, groundwater and forestry issues.

[291] **Mr Evans:** Bore da, good morning. My name's Michael Evans, I'm the head of evidence, knowledge and advice at Natural Resources Wales.

[292] **Ms Hall:** Good morning. My name's Natalie Hall, I'm a water manager for Natural Resources Wales. I manage teams looking after the water framework directive, water quality planning and water resource planning, and also planning with water companies for the investment that they need to make in improvements in the environment.

11:45

[293] **Alun Ffred Jones:** Diolch yn fawr iawn. Thank you very much. We'll kick off with Jeff Cuthbert.

[294] **Jeff Cuthbert:** Thank you very much, Chair. Good morning—still, just about. In order to start this discussion, could you set out your strategy for ensuring that Wales meets its obligations under the water framework directive? What barriers might there be to not achieving that? Do you think you have sufficient resources to meet your commitments in terms of water quality? And the final point from me at this stage: Dŵr Cymru have expressed concerns that some of the more difficult and expensive problems could be stored up towards the end. What is your response to that?

[295] **Ms Hall:** I'll start. The water framework directive provides us with a framework for planning for improvements in the water environment. Every six years we produce a plan in consultation with our stakeholders, which sets out how we will improve the status of the water environment. That also acts as an umbrella for how we plan to deliver other improvements for other directives, such as the bathing water directive and the habitats directive, where there are aquatic species. So, we start with looking at the evidence. We look at where water quality is now and where we need to get to to meet the objectives of the different directives. Then again we use evidence to establish the reasons for why we're failing to get there. For example, there might be water company discharges or diffuse pollution from agriculture or metal mine discharges. Then, we work with our partners through our river basin district liaison panels, through liaison groups across Wales, and through a number of consultations where we gather information to identify the actions to tackle those reasons for failure and to close the gap. In doing that, we look to deliver multiple outcomes—so, not just benefits for water quality improvements, but to tackle flood risk and biodiversity at the same time, for example. Whilst the water framework directive encourages us to plan a river basin district scale, we actually complement that with discussions and catchment workshops at a scale more relevant to stakeholders and communities at the local level. As I say, we do formal consultations. We consulted with our stakeholders on how they wanted to work with us. We gathered information through a challenges and choices consultation on what they felt were the most significant water management issues out there. Then, we produce that plan, as I say, every six years. The next plan we've just consulted on for a period of six months. We'll publish our response to that consultation in July, and that plan will be published again at the end of this year. It's important to say that it sets out actions not just for NRW but for other sectors as well that need to contribute. So, it's definitely a partnership approach that we'll need to ensure that we deliver the objectives.

[296] **Mr Evans:** Can I add a little bit? A part of your question was about resources. As you know, we're a new organisation. We're still in the process of integrating all of the functions of our predecessor bodies and we have a new approach given to us by the Welsh Government in terms of natural resource management, which, as Natalie's touched upon, is looking at more integrated outcomes for the environment. The resource situation is tough. We've had grant in aid cuts this year and we've had flat income from our charging schemes. In the current times, we're not looking at riches in the future. So, I think it's incumbent on us

to make sure we're targeting our resources and that we're getting the best out of our investments. Key to that—and particularly in terms of compliance with the water framework directive—is making sure that everybody plays their role, so that everybody is not just looking at us to wave a magic wand and that the partners, some of which you've heard from today, like Welsh Water and the voluntary groups working out there, are all playing their part in helping us to become compliant.

[297] **Alun Ffred Jones:** Llyr.

[298] **Llyr Gruffydd:** Yes, just picking up on the resource situation, if you like. I noted that you do say that you're going to rationalise your monitoring programme and concentrate on the essentials, as you put it, but that is driven, therefore, by the reality of the resources available to you.

[299] **Mr Evans:** It is, but it's common sense, in a way. If you look at where we've been successful—I think you've heard this morning about the bathing water directive and our success in getting some very good results there—it wouldn't make sense to carry on gold-plating our monitoring work on that. At the moment, we're doing well above what is the standard requirement from Europe in terms of monitoring. I think we go out between 16 and 20 times during the season to monitor these beaches, and we're only asked to do that once pre-season and four times during the season. So, where we can see a stable and good outcome, we will take resources away from that monitoring and put it into areas where we know we have problems or we know we need to do more investigative work. So, it's not just about saving money; it's making sure we get the best out of our investments.

[300] **Alun Ffred Jones:** In terms of resources, are you adequately resourced to do all the work that is required, in terms of the water framework directive?

[301] **Mr Evans:** Well, I think we have enough resources to play our part, but, as I say, the challenge is to make it very clear what our partners and the wider society has to contribute to it. So, the more resource you have, the more you can do and the more quickly you can do it, but we're confident we're well equipped to deliver the water framework directive.

[302] **Ms Hall:** There are some things that—

[303] **Mr Vaughan:** I was going to say—can I add just simply on that, that, on trying to push forward some of the agendas that we've got, a lot of the issues that we face we haven't solved in many, many years? What we've tried to look at, as well as trying to squeeze resources to focus on the big issues out there, is innovative approaches, and we've done quite a lot of work, particularly with Welsh Government funding through the Department for Economy, Science and Transport to look at alternative ways of trying to tackle some of the issues. We just briefly mentioned earlier on about mine waters; we've got a whole programme of work currently looking at new ways, with small to medium-sized enterprises, to try to tackle some of the issues that we face across Wales. We've got 1,300 metal mines in mid and north Wales, with fairly toxic chemicals coming out of them—cadmium, zinc, and so on—and we're looking at very, very innovative approaches to try to tackle some of those issues by treating the water in new and exciting ways.

[304] **Alun Ffred Jones:** Llyr.

[305] **Llyr Gruffydd:** Dŵr Cymru were advocating clearly aligning investment programmes so that you're maybe maximising the potential through working in the same areas, maybe at the same time. Clearly, that's something you're amenable to.

[306] **Mr Vaughan:** Absolutely. There will always be a limited amount of money to tackle

these things. The cost of tackling metal mines is massive. We've got one particular scheme at the moment, up at Frongoch near Aberystwyth, where it's costing us over £1 million to remediate one site. If you've got 1,300 across Wales, I'll let you do the mathematics on that to work out how much that could cost us. It's a huge problem, if we follow the tried and tested ways that we've always used, so we're looking at new ways of doing that, and that's working with others in partnership so that we can bring our collective ideas together, but also trying to look at ways of finding new ways of doing things, and even creating businesses. This is the idea of the work we're doing with EST; we're trying to develop new businesses with new small companies that have got very bright ideas that are way beyond anything we've ever anticipated. If we can make those things work, then obviously we'll make a business outside of Wales as well.

[307] **Alun Ffred Jones:** Jeff.

[308] **Jeff Cuthbert:** On the issue of metalliferous mines, which presumably were privately owned, who is actually responsible for paying for pollution caused by the metalliferous mines? Is it the case that the old companies have gone into liquidation and disappeared, and therefore it falls to public funds, or is there a way in which the owners or former owners of those mines should be brought to task?

[309] **Mr Vaughan:** Most of them have closed down for more than a century and, as a consequence, there is no company around any more that takes on the liability of them. So, in those cases, we're working through Welsh Government. Also, it sounds quite strange, doesn't it—I suppose, when we think of mining, we often think of coal mining—but we're actually using the Coal Authority, because of their experience in cleaning up coal waste sites, to look at the metal mine sites in Wales.

[310] **Jeff Cuthbert:** But, where there are still owners, do they pay?

[311] **Ms Hall:** Yes, they would now. Regulations were introduced in the late 1990s, I believe—the Mines (Notice of Abandonment) Regulations 1998—which meant that any mine closed after that date would be responsible, but obviously the majority were closed before that time.

[312] **Alun Ffred Jones:** You talked about collaborative working, and that presumably involves the third sector. When the third sector came before us—although not for this particular session—they said that the relationship with NRW was not, shall we say, productive and certainly that things had deteriorated since the days of the Countryside Council for Wales. So, in terms of collaboration, how would you respond to that?

[313] **Mr Vaughan:** I think, from my own personal experience, within the areas that I work, the collaborative atmosphere is particularly good. I think that we've come into a new organisation over the last two years and we've worked very hard to work with others because we recognise the need to take that more holistic approach across the environment. We recognise that we can't deal with all of the issues ourselves and all parties out there have a very important part to play, and by working with them—and they've been very productive and willing to work with us—we've moved the agenda a long way forward. I'm sure there are some organisations out there who perhaps haven't felt that we've paid so much attention to them, but I guess, as a new organisation, we're looking more at Welsh Government's and our own policy issues, and our vision, and trying to entice those organisations that can work with us to deliver those things, and engage more with them than perhaps in previous legacy bodies, where we were perhaps used to providing moneys just to those organisations for them to survive. Now, we're more using the money that we have to focus them more and encourage them to work more with us on the issues that we have to try and tackle for Wales.

[314] **Alun Ffred Jones:** Diolch yn fawr. Russell.

[315] **Russell George:** Thank you, Chair. The Wye and Usk Foundation have suggested that poultry units are an increasing source of pollution and that insufficient constraints are placed on the management of these units. So, I wanted to obviously ask for your views on that, but also ask what responsibility there is on Natural Resources Wales to actually provide that regulation.

[316] **Mr Vaughan:** Do you want to kick off, Natalie?

[317] **Ms Hall:** If I begin, many of those poultry units fall under the 40,000 bird threshold, so they fall outside regulation.

[318] **Russell George:** Can you just explain that, because that was a bit unclear from earlier discussions with Rachel? There's a distinction between above and below 40,000. Can you just clarify that?

[319] **Mr Vaughan:** Yes. An above 40,000 bird unit comes under the integrated pollution and prevention and control regulations, and therefore we have some regulatory duties as a result of that. If they fall below that level, then they fall outside that approach, and therefore we don't have a regulatory duty to oversee what they do. The only control that we have is that, when someone proposes such a unit, it goes before planning, and, under the normal planning rules, we will give advice to the planners on what we think the impact will be.

[320] **Russell George:** Right, okay. Thank you.

[321] **Mr Vaughan:** Whether the planners then choose to take on board our view is a different matter, but that's the way that we deal with things.

[322] **Alun Ffred Jones:** Do you accept the evidence that's provided by Dŵr Cymru that some of these units have been placed too near watercourses?

[323] **Mr Vaughan:** I don't have personal knowledge of those particular sites, but what I would say is that, within catchments, we have to take all of the inputs into consideration, and, if there are a number of units in a particular catchment, they will be contributing to the overall loading on the water quality within that catchment, as will other issues as well, whether it's farmers fertilising their land, water companies discharging through sewage works, septic tanks, that type of thing. When we look at the management of water quality within that catchment, we have to take all of those issues into account, and so we'd look at each of those poultry units and see what the overall impact, the combined impact, is.

[324] **Alun Ffred Jones:** Llyr, on this issue?

[325] **Llyr Gruffydd:** The suggestion was, of course, that there's a danger that NRW leave it to the planners and the planners leave it to NRW. Is that a potential danger that you recognise?

[326] **Mr Vaughan:** No. I think that, when planners get the application in, we are a consultee and they inform us. We give advice on that application. The gap in the pavement at the moment on that is the fact that the local planners can ignore what we've said. That's the failing of the system, if there is a failing.

[327] **Alun Ffred Jones:** Russell.

[328] **Russell George:** What you put to us now is what I would understand as well. There's

not a gap, because the planning authority's responsible, and whether they take your advice is a matter for them. But I suppose what the suggestion is is that—or the question I would ask is: have you got sufficient expertise to provide local planning authorities with the correct analysis, if you like?

[329] **Mr Vaughan:** The answer is 'yes'.

[330] **Russell George:** Right. I think you had a comment as well, sorry.

[331] **Ms Hall:** I'm sorry, I can't quite remember what I was going to say. But certainly we are working with the farmers and the wildlife trusts in those areas. There is a potential risk because of the cumulative effect, that, collectively, those sites could pose a risk to water quality, and so we're working in groups in that area to make sure that that doesn't happen—

12:00

[332] **Alun Fred Jones:** Could I just interrupt you? Dŵr Cymru said specifically that they'd seen evidence that there is pollution happening because of these. You haven't seen this.

[333] **Ms Hall:** We don't have evidence that those sites are causing failures. As Bob explained, if there are failures of phosphate, for example, in those catchments, there are also sources of sewage inputs from sewage works. So, we can't tease out the two; it'll be a contribution from both. So we need to tackle all issues on a catchment level and that's what we're seeking to do, by working with everybody in the catchment.

[334] **Russell George:** I think what we're trying to establish from earlier evidence is to what extent there have been reports, made to you, of pollution from poultry units. Is that a—

[335] **Ms Hall:** Certainly the wildlife trusts have signalled that they have evidence of inputs from those sites and we'd encourage them to share that with us.

[336] **Russell George:** But it would be your—. Well, would it be your responsibility to go and test or would that be the responsibility of another body?

[337] **Mr Vaughan:** We monitor the water quality all of the time—so, at certain locations within the catchment. We won't specifically go up and pick on those units because we'd be picking on everybody within the catchment. We do general monitoring, back-row monitoring, within the area, and as a consequence—

[338] **Russell George:** What I'm struggling with is that there are others telling us that there's evidence there. Surely, through the process, somebody would have approached you and asked for your comment on it and then you would go out and presumably investigate that—

[339] **Mr Vaughan:** If a member of the public came to us and said there was a pollution incident, we would go out and investigate it and, if we found that there was a problem, then we would prosecute.

[340] **Russell George:** The question is to what extent that's happening.

[341] **Mr Vaughan:** I think that, out of all the units we have across Wales, we've had one case where we've gone out and prosecuted someone for a problem from a poultry unit. I think that's right, isn't it, Natalie? There's only one case.

[342] **Ms Hall:** I don't have those figures, I'm afraid. Would you like us to send those through?

[343] **Russell George:** Thank you.

[344] **Alun Ffred Jones:** Joyce.

[345] **Joyce Watson:** In the debate on water quality, there is a general binding rule and we were told just now that that would complement and simplify existing rules and also catch those units that we've just talked about—and I don't particularly want to talk about those all the time—that exist below the threshold. So, taking and moving the debate forward, are you in support of general binding rules and is your understanding as was explained to us, about their implementation?

[346] **Ms Hall:** Yes. I think we welcome that Welsh Government have included examination of general binding rules in their water strategy document. We'll certainly be providing the evidence that we have on their implementation in Scotland and why we think they might be of benefit to different types of activity in Wales. This could be an example where there is a gap where you could have a general binding rule, yes.

[347] **Joyce Watson:** Okay. If I can then ask, Chair, if you will give more detail about the scheme that NRW has developed with dairy farmers and First Milk—and that's in Pembrokeshire, where I live—to offset extra nutrients getting into water. So, those two things fit, I thought, quite nicely together.

[348] **Mr Vaughan:** When we were talking earlier on about resources, I think this is a very good example of the types of things of where we're being proactive. Regulation is a very important part of our toolkit as an organisation. We will use that as appropriate, when we need to, but we find that, by taking innovative approaches, such as the First Milk work done in west Wales, that's a very good proactive way of trying to work with the industry to make sure that they recognise the impact that their activities have within a catchment and then take steps to try and improve so that we don't end up having to prosecute or having to create nitrate vulnerable zones across Wales.

[349] For those who may not know much about this, this was an area where we recognised that a local sewage works couldn't take the material from the dairy. By the dairy then working with the farmers who feed milk into that area, they could reduce their impact in terms of discharges within the watercourse and therefore reduce the amount of material or the overall loading on the catchment, and, as a consequence, help reduce the impact on the sewage works and allow First Milk, then, to put their waste into that system. So, it was a way of getting everybody within the catchment to reduce their impact, and we felt that was a very, very good approach, rather than having to regulate and create new investment in assets just to deal with what we would class as an end-of-pipe solution. It's about going back to the source of the problem and trying to tackle it there.

[350] **Alun Ffred Jones:** Bill, did you have—?

[351] **William Powell:** Thank you, Chair. Staying with the topic of nitrate vulnerable zones, do you feel that NRW could provide more proactive support, particularly to farm businesses that are directly affected by that designation and find it very difficult to sustain their business with the restrictions that are brought forward?

[352] **Mr Vaughan:** The simple answer is 'yes'. I think we want to try and work more with farmers to try and do this type of thing, and again, in that area of west Wales, we're trying to look at broadening the First Milk approach to cover the whole of the Cleddau catchment,

which I think is about 2,000 farms. The principle behind that would be that we'd work with farmers now. We could quite easily go ahead—well, it's not easy, but we could—and create a nitrate vulnerable zone, and we feel that that's a failure, because once you get to that point, it takes at least eight years to rescind that designation. If we work with the farmers now, we could stop the catchment reaching that level, and therefore most probably reduce some of the more stringent restrictions that farmers would then have to operate within. As far as we're concerned, that's a win-win situation. The environment wins, farmers win and we don't get into that regulatory approach. So, yes, we want to try and push that as much as possible. Within Wales, we have a very low level of nitrate vulnerable zones. We're at about 3 per cent.

[353] **Ms Hall:** It's 2.4 per cent.

[354] **Mr Vaughan:** It's 2.4 per cent, whereas, in England, I think it's about 60 per cent, so we've tried to work more closely with the farming unions and the individual farms to try and encourage that type of approach, because we see that that's the right way. We've termed it—as you may see in the media—as the amber-lights approach. So, we try and recognise the areas where the nitrate levels locally are starting to rise, and we start to raise that with local farming unions. Through their expert knowledge with local farmers, we work with them to try and put the things that we know will work into practice, and then get everybody to work as a community to try and reduce the impact that they're having.

[355] **William Powell:** What scope is there for the newly relaunched Farming Connect programme to actually deliver that more proactive support that you spoke about?

[356] **Mr Vaughan:** We see that type of advice to farmers as a key area. We've worked very closely, advising Welsh Government, helping them prepare the COGAP work, the code of good agricultural practice guidance for farmers, so that we can try and anticipate what's going to happen and give the advice upfront to do it. Farming Connect, too, is a very, very useful tool for us to work with farmers—on a range of different issues, not just nitrate vulnerable zones—on just how they operate on the farm scale, to try and encourage them to understand the impact that their activities are having, and then help them put things in place. Some of them are quite simple measures that then help reduce the impact, the loading that they have on the environment. At the end of the day, the environment itself can only accept a certain amount of material in it before it starts to cause problems. By recognising that and working with the operators—and it would be a wide range of different participants within a catchment—we can help them all try and reduce the impact they have, so that we create a head above, within the environmental set-up, so that we've still got a bit of free board within the system, so that we don't have these problems.

[357] **William Powell:** That's helpful. Chair, on another topic, briefly, if I may?

[358] **Alun Ffred Jones:** Llyr had the next one.

[359] **Llyr Gruffydd:** More widely, in terms of the RDP, clearly, we are at a stage now where specific projects and programmes are being developed and designed. I was just interested in knowing to what extent you're proactively involved in developing those kinds of schemes, because we know the general areas of expenditure. The sustainable production grant clearly will be one important source of improving infrastructure to tackle or to improve water quality, and I'm just wondering, as suggested to the NFU, whether maybe co-production and that kind of inclusive approach to developing those proposals would be amenable to all of us. Clearly, I'd imagine that you would be keen to play your role in that respect.

[360] **Mr Vaughan:** We do play our role in that respect. I think that when you've got a programme of £950 million over the next seven years, if we have ambition, and Welsh

Government has ambition, to improve the environment and see that improve, and the water framework directive is pushing us that way, this is a large amount of money at a time when perhaps our budgets elsewhere are being squeezed. We are trying to take full advantage of that, and we've worked very closely. I sit on the CAP programme board in Welsh Government to try and influence from NRW's point of view, to give them the advice on the areas that we want to see improved, and to look at the whole programme to see where we can take advantage. We give advice to Government on that. We've given advice on the areas that they can concentrate on through the different schemes, whether that's Glastir Advanced or Glastir Commons or the Glastir entry scheme. We've prepared a lot of evidence and information for them to help them focus on the areas that they need to look at, whether that's water quality or water quantity issues—flood risk. We've tried to influence all of that type of thing. We're also working very carefully with them and providing advice and support on the Glastir woodland scheme as well. So, I think we're playing a very full part in that.

[361] **Alun Ffred Jones:** William.

[362] **William Powell:** Thank you, Chair. The other topic I wanted to raise briefly is that, as well as their concerns around poultry units, the Wye and Usk Foundation spoke of their very positive collaboration across the border in Herefordshire with your colleagues in the Environment Agency, in terms of catchment management and so on. To what extent do you see that as a model that could be rolled out on this side of the border with yourselves?

[363] **Ms Hall:** Well, I think we do. I think we have the same positive relationship. The environment Bill is driving us in the direction of moving in that more catchment management approach. We've got the three trials at the moment in the Dyfi and the Tywi and the Rhondda, where we're trialling working in a catchment way to deliver multiple outcomes, working with communities and partners to try and solve lots of different problems at one time. So, I'd say we are working in that way.

[364] **William Powell:** Yes. I think their point was about capturing the energy of the local communities and working intensively with farmers and landowners—

[365] **Mr Vaughan:** I think we recognise that we can't do everything ourselves. Often, some of these organisations—and I work quite a lot with the Wye and Usk Foundation personally—can open doors that we can't. I've experienced it many times: approaching the farm gate wearing my legacy organisation—the EA—badge, I wouldn't have been allowed across the threshold, whereas other colleagues would. I think that's the key thing. It's about building the trust and working with these organisations. Yes, I think it's a very important stretch that I hope we've been building on for many, many years, actually. It's not something new.

[366] **Alun Ffred Jones:** Time is pressing. Michael Evans.

[367] **Mr Evans:** Could I just add that I think water is the clearest example that we use when we're talking about what integrated natural resource management means? A linear approach, either dealing with quality here or quantity there, will only take you so far down the road. So, we must look at the whole catchment, and we must look at all of the factors that impact on quality and work in partnership across the board. Doing something in isolation with one partner will only, as I say, solve a part of the problem. Quality is related to the physical environment, how we use the catchment, the physical environment of the river and the resource—so, the actual amount of water there, as well.

[368] **Alun Ffred Jones:** Can I ask a question, lastly? Can you provide details of the 'significant improvements'—I think those were your words—that NRW has made through its management of the public forestry estate?

[369] **Mr Vaughan:** Okay. I think this is a big area. The Welsh Government woodland estate covers around 7 per cent or 8 per cent of the whole of Wales, so it's not an insignificant area. We've recognised that it's an asset that we should be using to improve the environment generally across Wales, not just to produce fibre or timber products. So, as a consequence, we've been looking very closely at that estate to see what types of improvements we can make on it. If you look back, this is something, again, that is not just within NRW's gift—it goes back into the legacy organisation with the Forestry Commission. The forest estate is something that we want the communities of Wales to benefit from, and so a lot of access and recreation and so on has been promoted within those areas. On the environmental side itself, we think that trees have a major part to play in some of the catchment issues or the visions that we have for water quality and water quantity within Wales. So, as a—

[370] **Alun Ffred Jones:** What improvements have you made?

[371] **Mr Vaughan:** Improvements in what respect?

[372] **Alun Ffred Jones:** Well, I think these are your words, aren't they?

[373] **Mr Vaughan:** Oh, right. Okay. Sorry, yes. For example, we've recognised that we have had issues in the past where we currently take an approach on clear fell and, although we suggest that we'll move to continuous cover forest in the longer term, in the short term, we still have to clear woodlands wholly and remove the whole area.

12:15

[374] That exposes the soil, and, as a consequence then, you've got the risk of increased run-off sediment being transported, and then the pollution downstream. So, at the moment, we're training all our staff up, before all that happens, to work out the types of things that need to happen on that particular piece of land to reduce the risk. As a result of that, we're training our staff up. They have to do a proper management plan before all that happens, and they have to look at the risks that could occur when that woodland is taken away, so we try to anticipate the impact that that might have and try to mitigate that impact.

[375] Similarly, we use pesticides within that type of forestry approach. We know that those pesticides are very, very good at what they do. They do exactly what they say on the tin: they kill everything. So, as a consequence, we have to be very, very careful how we use them. We recognise that that will be unacceptable in the future and that they're too high a risk to use, so we've been looking at alternative ways of trying to remove our dependence on pesticides. Now, whether that's changing the way that we manage the woodland, or introducing new innovative approaches like nematodes and different approaches to clearing, leaving the area for a number of years before we replant, there's a whole series of different steps we are taking.

[376] We are also at the moment working with Welsh Government to review what the Welsh Government woodland estate is all about. So, we want to try and revalue what it's there for and what value we can get from it.

[377] **Alun Ffred Jones:** Okay.

[378] **Mr Vaughan:** They're just a couple of, you know—

[379] **Alun Ffred Jones:** No, I understand what you say. Very briefly, Joyce.

[380] **Joyce Watson:** You said you're going to use nematodes, yet there's research that

I've read that isn't actually—. Whilst obviously it's an improvement in the watercourse, because you're not putting in insecticides—and I'm not suggesting you use them—there have been question marks around using nematodes. Have you been reading any of that? Because we are out of time, if you have, could you give us a paper on it, please?

[381] **Mr Vaughan:** It's like all things: if you're doing an intervention like that, there is a risk associated with it. What we're trying to do is move to a position where we look at the risks and try to work out which is the best approach with the minimum of risk. Most of these approaches have some risk, and it's a case of choosing the one that has the least. Our ultimate goal is that we move more and more towards continuous cover forest where you don't have to go out and plant new saplings. The problem is that those saplings are the only source of food for the weevil that would normally live within the canopy of the trees. So, if you can change your practice, you don't need to put in any type of nematode or pesticide application to remove the problem.

[382] **Alun Ffred Jones:** Okay. Can I thank you for coming in and for giving your evidence forthrightly? That concludes this part of the committee.

[383] Diolch yn fawr iawn. Thank you very much.

12:17

Papurau i'w Nodi Papers to Note

[384] **Alun Ffred Jones:** Right, we will be moving on to the sixth item, which is papers to note. I'll take them one by one. *Gwaith Craffu Cyfoeth Naturiol Cymru*; NRW—further information. Okay? Then *llythyr Ymddiriedolaethau Natur Cymru*; that's the Wildlife Trust.

[385] **Llyr Gruffydd:** Could I raise one issue on the Wildlife Trust Wales letter? I am very concerned that we have a situation now where the imposition of a 7 per cent overheads rate is effectively forcing third sector organisations to deliver projects, or to deliver joint projects with NRW, at a loss, and I don't think that's acceptable.

[386] **William Powell:** It's not sustainable.

[387] **Llyr Gruffydd:** No, it's certainly not sustainable. I think that we should, as a committee, write to NRW expressing our concern that that is the situation, and that we copy the Minister in. I can't see that such a situation where, effectively, the third sector is subsidising joint working, or working at a loss at least, is acceptable in any way.

[388] **Joyce Watson:** Could I add to that? I'm actually meeting with them on Monday. It's one of the organisations I'm meeting on Monday, so I can act as a rapporteur again, if you like, having met another organisation last Monday, and feed back what they say to me in more detail, and the impact that it'll actually have in that area, if you think that's useful. But I'm doing it—*[Inaudible.]*

[389] **Alun Ffred Jones:** The suggestion is that we write a letter to NRW expressing our concern, and you are—

[390] **Joyce Watson:** Meeting with one of those organisations, who are going to give me greater detail about what that means.

[391] **Alun Ffred Jones:** When are you doing that?

[392] **Joyce Watson:** Monday.

[393] **Alun Ffred Jones:** Well, we can have a draft letter. You can provide further information, if you've got any, and if you want to improve that letter or add to it, then we can have an opportunity to do that next week. Is that acceptable?

[394] **Joyce Watson:** Fine.

[395] **Alun Ffred Jones:** Right.

[396] **William Powell:** Chair, could I just comment briefly on the letter from Roger Thomas?

[397] **Alun Ffred Jones:** I'm coming to that now.

[398] **William Powell:** You're coming to that. Sorry, I thought that was built into what you were already summing up. Okay.

[399] **Alun Ffred Jones:** I'm working my way very slowly through this. There's the letter from the Deputy Minister to note, I think. Then, the letter from Roger Thomas, and you want to comment on that, William.

[400] **William Powell:** I think there were a number of really substantial issues that Mr Thomas is raising, and I think potentially we should set aside some time to give it some further discussion. I don't think there's time for that now, but we certainly need to engage with him about some of the substantial issues that he's raising in this letter regarding the validity of some of the comments that were made during the memorable evidence session of 6 May.

[401] **Alun Ffred Jones:** I was thinking along the lines that we should certainly acknowledge the letter from Roger and thank him for the further information. The issue, in a sense, is—. Well, so you want a further discussion on this, do you? Okay.

[402] **William Powell:** I think it would be helpful in the early forward work programme.

[403] **Alun Ffred Jones:** I'll allow that; that's fair enough. And there's the letter from the Minister on the local development programmes and the population projections. Any comments on that, or are you just accepting it as information for the time being? Noted.

[404] That concludes that section.

12:22

Cynnig o dan Reol Sefydlog 17.42 i Benderfynu Gwahardd y Cyhoedd o Weddill y Cyfarfod

Motion under Standing Order 17.42 to Resolve to Exclude the Public from the Remainder of the Meeting

Cynnig:

Motion:

bod y pwyllgor yn penderfynu gwahardd y cyhoedd o weddill y cyfarfod yn unol â Rheol Sefydlog 17.42.

that the committee resolves to exclude the public from the remainder of the meeting in accordance with Standing Order 17.42.

*Cynigiwyd y cynnig.
Motion moved.*

[405] **Alun Ffred Jones:** Can we go into private session for a brief discussion on the letter to the Minister on the marine issue?

*Derbyniwyd y cynnig.
Motion agreed.*

*Daeth rhan gyhoeddus y cyfarfod i ben am 12:22.
The public part of the meeting ended at 12:22.*