



# HOUSE OF LORDS

Revised transcript of evidence taken before

## **The Select Committee on National Policy for the Built Environment**

Inquiry on

### **BUILT ENVIRONMENT**

*Evidence Session No. 25*

*Heard in Public*

*Questions 283 - 307*

THURSDAY 10 DECEMBER 2015

10.10 am

Witnesses: Tony Grayling and David Wilkes

#### USE OF THE TRANSCRIPT

1. This is a corrected transcript of evidence taken in public and webcast on [www.parliamentlive.tv](http://www.parliamentlive.tv).

### Members present

Baroness O’Cathain (Chairman)  
Baroness Andrews  
Lord Clement-Jones  
Lord Inglewood  
Earl of Lytton  
Baroness Parminter  
Baroness Rawlings  
Baroness Whitaker  
Baroness Young of Old Scone

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### Examination of Witnesses

**Tony Grayling**, Director of Sustainable Business and Development, Environment Agency, and  
**David Wilkes**, Honorary Vice-President, Chartered Institution of Water and Environment Management (CIWEM)

**Q283 The Chairman:** Welcome to this evidence session of the Select Committee on National Policy for the Built Environment, Mr Grayling and Mr Wilkes—and members of the public too. We hope you enjoy it. You have in front of you a list of the interests that have been declared by members of the Committee. A transcript of the meeting will be taken and published on the Committee website and you will have the opportunity to make corrections to it where necessary. Could I begin by asking each of you to briefly introduce yourselves to the Committee, please? This is for the purpose of making sure that the transcriber knows who says what.

**Tony Grayling:** I am Tony Grayling. I am director of sustainable business and development at the Environment Agency.

**David Wilkes:** I am David Wilkes. I am an honorary vice-president of the Chartered Institution of Water and Environmental Management.

**Q284 The Chairman:** I am sure we will have a very good session today, particularly on the issue of water, so thank you for coming.

The first question is from me. Does national built environment policy take sufficient account of environmental resilience? Is the regulatory framework fit for purpose?

**Tony Grayling:** I think that the national framework is there, and at the heart of it is the National Planning Policy Framework and the supporting planning policy guidance. Alongside

that are the adaptation provisions of the Climate Change Act and the framework that sets in place, so there are the vehicles for the integration of resilience into the built environment. I do, however, think that there is always a need to keep things under review and to learn from experience, and I am sure that there is always room for improvement.

**The Chairman:** I think that is a very apt description of the situation. The other areas that need resilience are the National Planning Policy Framework and the guidance. The way things are happening at the moment, they have to be up in the air. Life is going very quickly through this area with the issue of climate change and the local issues regarding the floods that have happened. It is in a state of flux. Are you taking that into account? Is there anything that should be firmed up in these agreements?

**Tony Grayling:** It is certainly the case that our approach as a statutory adviser in the planning system is to take account of our latest understanding of climate science and the likely impacts on England in particular. Our work incorporates the latest UK climate projections, but they date back to 2009, and we are about to go through a process of updating those projections. With the events that we have had over the last few days, with the serious flooding in Cumbria and Lancashire, it is important that we stand back and take another look.

**The Chairman:** Indeed, because it is not only the UK situation with the frightful flooding that we have had but also what is going on in Paris.

**Tony Grayling:** Absolutely. Primarily, Paris is about the world coming together to ensure that greenhouse gas emissions are reduced so that in the future there are fewer impacts from climate change. However, as a result of greenhouse gas emissions already made, we know that inevitably there will be further climate change.

**The Chairman:** There is no point in double-guessing. We will have to wait a while. When are we going to have the conclusions of the discussions taking place in Paris at the moment?

**Tony Grayling:** It is not an area of responsibility for the Environment Agency; the lead department is the Department of Energy and Climate Change. I am watching eagerly, as I am sure you are, and I believe the organisers in Paris think that they could reach conclusions by the end of this week. Experience has shown that these UN climate change conferences tend to overrun, and there are all-night sittings, but they eventually get to a deal, and the signs are reasonably positive on this one.

**The Chairman:** Mr Wilkes, what are your views on that?

**David Wilkes:** I would agree broadly with that. We will see the headlines through the newspapers and through the television. I am cautiously optimistic that common sense is prevailing. I would amplify what Mr Grayling has said; there is a lot of evidence that greenhouse gases have been emitted into the atmosphere over the last 200 years, and there is so much inertia in our climate systems that, precautionary wise, we should not expect the weather and the climate for the next 100 years to be the same as we have seen for the previous 100 years. I think we are set to see change.

**The Chairman:** Change like the change that we have had over the last three or four years?

**David Wilkes:** I fear so, yes.

**The Chairman:** That is not a very happy scenario, is it?

**Q285 Lord Clement-Jones:** In that context, the Greenpeace report suggesting that something like nine out of 20 sites identified for housing are at risk of flooding does seem to be quite an interesting counterpoint to overall national policy. How can that sort of situation arise? Is the report correct, and therefore do our policies need to be reviewed?

**Tony Grayling:** I have seen that report and I would say in response that the critical thing is that when there is a major housing development, the local authority, when it receives the planning application, is obliged to consult the Environment Agency, and we will give our advice as to whether we think the location is suitable for housing and whether particular design measures need to be built in to ensure environmental resilience, including resilience to flood risk. The evidence from our work is that in 98% of cases where we respond on flood risk, the outcome is in line with our advice, either because the planning application was suitable, or was amended in line with our advice, or was withdrawn or refused. In 98% of cases where there are housing developments, our advice is taken.

**The Chairman:** For clarification, is that statutory? Do they have to ask for your advice, or is it a “nice to have”?

**Tony Grayling:** No, they have to. We are a statutory adviser in the planning system.

**The Chairman:** So they cannot go ahead with a development unless they have advice from you on this issue?

**Tony Grayling:** For major developments that is absolutely correct, yes.

**Lord Clement-Jones:** Despite what Greenpeace says, these sites will be resilient as a result of having taken your advice?

**Tony Grayling:** I cannot comment on the individual sites because I have not seen that level of detail, but our advice might be anything from, “Yes, go ahead. Your planning application is suitable”, to, “No, we do not think that the development should be allowed to go ahead”, or something in between with resilience measures built in.

**The Chairman:** Do you have a similar situation with your responsibilities on water?

**Tony Grayling:** We also advise on issues to do with the management of water and waste water, and land quality and water quality.

**The Chairman:** And that is statutory also?

**Tony Grayling:** That is a complicated question. It is statutory for flood risk and a number of other things, but not for everything.

**The Chairman:** Would you like it to be for everything?

**Tony Grayling:** We have been in discussion with the Department for Communities and Local Government about rationalising where we are and where we are not a statutory consultee. The fortunate thing is that local authorities tend to take our advice even where we are not strictly a statutory consultee but where they consider we have the relevant expertise.

**The Chairman:** That is good. Have you anything to add to that before I open it up to the Committee, Mr Wilkes?

**David Wilkes:** No, I do not believe I have.

**Q286 Earl of Lytton:** I am a chartered surveyor and in the past professionally I have suggested that there ought to be an approach to dealing with surface water run-off in existing housing stock, which of course by bulk is the major portion of what we are dealing with. The suggestions have fallen on completely deaf ears as to whether there should be some conditionality when a property is extended, and whether there should be surface water attenuation, if not actually a SUDS approach. Is that because it is not considered relevant or that the stock of older buildings is safe from this surface water surcharge? Why has that suggestion seemed never to have had any traction?

**Tony Grayling:** Surface water is a real issue and the risk of flooding from surface water is likely to increase with climate change, as is the risk of flooding from rivers and the sea. Under the framework for flood risk management, the primary authority for surface water flood risk is the lead local flood authority. Generally speaking, that is the county councils, so they ought to be incorporating into their local plans and into their approaches to

development in their area policies that are about the management of surface water flood risk, as well as the management of flooding from the rivers and the sea.

**Earl of Lytton:** Do you scrutinise local plans to see whether that sort of provision is included or not?

**Tony Grayling:** We are also a statutory consultee on local plans and, yes, we will inspect local plans in relation to the flood risk policies that they contain.

**David Wilkes:** The Earl of Lytton's point is well made in that there is significant surface water risk to existing properties. It is sometimes very surprising why people do not take advantage of grants opportunities to reduce their risk. There is almost an apparent philosophy that people are in denial and think that it probably will not happen, so they may as well save their money and energies for doing something else.

**The Chairman:** What about the car having precedence, in other words people concreting over their gardens?

**David Wilkes:** That has to be something that we discourage.

**Q287 Baroness Young of Old Scone:** I should declare some interests having been the chief executive of the Environment Agency and also a trustee of IPPR when Mr Grayling was there, and I have also been an honorary fellow of the Chartered Institution of Water and Environmental Management, so I am compromised in both directions, but nevertheless—

**The Chairman:** Any more?

**Baroness Young of Old Scone:** There are probably a few more in there. I have two questions, one for Mr Grayling and one for Mr Wilkes. Clearly, the assumptions that are made about the future increased risk of flooding from climate change are very important, because houses and buildings last for a very long time. Do you think that the current assumptions that are being made about future flooding risk are sufficient, or are we building houses in those parts of the flood plain that may be resilient against the sorts of floods that we have experienced in the past but not the future? A one-in-100 year risk of flood will rapidly become a one-in-50 year risk, and perhaps even a one-in-30 year risk in the very near future. I will give Mr Grayling time to think about that while I ask Mr Wilkes his question. In your very useful evidence, you said that you did not think that the current policy arrangements were particularly good on several fronts, including building standards for thermal efficiency and water use, sustainable drainage, parks and green space, energy efficiency and water efficiency, retrofit and join-up across the whole spectrum of the green environment, and the

environment in general. Could you tell us more about that part of your evidence? I will leave you time to think about that while Mr Grayling tells me the answer to the first one.

**Tony Grayling:** The current approach is based on our best understanding at the moment of the likely impacts of climate change in the future. Over time our understanding gradually improves, but it is only a gradual improvement. For example, I would not expect the next iteration of the UK climate projections, which are due to be developed by about 2018, to be radically different from the projections that we are currently using that were published in 2009, just as those projections were different, but not radically different, from those published in 2002. There is a gradual change, and I think we have always to be updating our approach in line with the best available science. It is quite hard to judge that against individual events such as the serious flooding we have seen over the last few days. The truth is that it is almost impossible to make a direct attribution of those events to underlying climate change, because you have a lot of natural climate variability and underlying that is a longer-term trend of climate change.

**Baroness Young of Old Scone:** It is true to say, however, that that phenomenon of storminess, if it happens as predicted, will become more frequent with climate change?

**Tony Grayling:** That is right. The climate predictions suggest that we can expect warmer and wetter winters, with a higher propensity for intense rainfall events. There has been some statistical attribution of, for example, the serious flooding that we saw in 2000, and I think the Met Office has recently published some evidence that suggests that if you have the kind of atmospheric circulation conditions that we saw in the winter of 2013-14, an intense rainfall event over a 10-day period is more likely than it would have been in the absence of climate change, yes.

**Baroness Young of Old Scone:** On that basis, are we achieving tough enough standards on flood protection and prevention of building in the most vulnerable parts of the flood plain, or is the Environment Agency in the position where it has to walk a dreadful line of not declaring too many areas unsafe because it does not have the money to protect them?

**Tony Grayling:** We do, honestly, try to use the best available science. In the light of the events over the past few days, we have made a commitment to have another look at the process by which we design flood schemes, particularly in the areas that were impacted, and the allowances that are built into climate change. I would not want to pre-empt the outcome

of having that look. I believe that we are doing our best to incorporate the best available evidence about climate change and its impacts on the UK.

**The Chairman:** Mr Wilkes, do you want to add anything to Lady Young's question?

**David Wilkes:** I think my colleague has adequately dealt with that part of it.

**Baroness Young of Old Scone:** Could we have Mr Wilkes's comment on his evidence, because Mr Grayling seemed to be implying that everything in the garden is rosy, when the evidence is very much the opposite—that it was not, particularly?

**David Wilkes:** The first on the list was to do with the thermal efficiency of buildings. Given that almost a third of the UK's contribution to climate change emissions comes from the heating and cooling of buildings, that is an area where we could be looking at making considerable savings. With the Code for Sustainable Homes and the codes for commercial retail buildings, the problem is not so much new stock but our existing stock of buildings, and the lack of incentive, and lack of easy ways in which people can afford to make their buildings more thermally efficient, so cooler in summer, healthier for people to live in, and using less fuel to heat them in the winter.

**The Chairman:** But the general public are not really aware of these implications, are they?

**David Wilkes:** Absolutely, and the philosophy, I suggest, is much more short-termist: how much do I have to spend for heating this winter?

**The Chairman:** We have dealt with this in previous sessions. If you had meters and everybody could see how much it is costing them to keep the lights on or to keep the heating at 20 degrees, or whatever, it would be all right, but there seems to be objection to putting them in. I do not know why. Would you be for these meters in homes?

**David Wilkes:** I am very much in favour of education and then making it easy for people to understand what actions they can take to retrofit existing property.

**Q288 Baroness Andrews:** I would like to follow that and come on to a couple of other areas. Some developers are still building to Code 5 but very few. There are a lot of new technologies that would enable some retrofitting. Do you have any idea how much it would cost to retrofit 22 million houses built before 1922, or whatever it is? That is the scale of the problem, is it not, because, as you say, a third of our carbon emissions are coming from homes?

That is a very specific question, but the general point you are making in your evidence, Mr Grayling, is there is a loss of regulatory impact because so much has been effectively

deregulated in recent years. You propose a policy statement for planning. Do you think that the NPPF could be strengthened in such a way as to put back into it, with any effect, some of the things we have lost? What arguments would you use to persuade the Government?

If I may ask our other witness a question, we lost PPG25 in the course of creating the National Planning Policy Framework. PPG25 was the old planning policy guidance on flood control and was extremely popular and very effective policy guidance. Have we lost anything from that through the NPPF which we could make a case for restoring in the NPPF?

**Tony Grayling:** I will, if I may, pick up on that first because part of my own team's responsibilities is planning policy guidance. We are satisfied that all the important elements of PPS25 were incorporated in the National Planning Policy Framework and in the supporting planning policy guidance. There is always room for us to have another look and to improve things. We have had some success in that. For example, we have been able to influence the development of building standards so that a higher standard of water efficiency can be applied to new housing in water-scarce areas, for example. Looking at planning guidance and reviewing it and making sure that it is fit for purpose is an ongoing process.

**Baroness Andrews:** That is guidance, is it not, and councils do not have to follow that guidance, do they? It is not compulsory.

**Tony Grayling:** No, in principle they do not have to follow our flood risk guidance either, but in practice they do because they accept that our advice is authoritative.

**The Chairman:** It sounds as though we need to strengthen the statutory implications of this. It seems as though you can take it or leave it if you are a builder. Is that right?

**Tony Grayling:** It is the planning authority that makes the decision.

**The Chairman:** So the planning authority can take it or leave it?

**Tony Grayling:** The developer puts in a planning application, but it is up to the local authority whether to accept that planning application, or to reject it, or to require amendments to be made that build in resilience conditions, including flood risk, water resources, energy efficiency and so forth.

**The Chairman:** So it is actually the local authority? It is not the local authority under a statutory order?

**Tony Grayling:** Local authorities have to balance a lot of different factors when they make decisions on planning.

**The Chairman:** Do you think it is too loose, in other words?

**Tony Grayling:** I do not, no. If we continue to have serious concerns about planning applications, there is provision for them to be called in. A necessary feature of our system is local democratic input into planning decision-making, as well as having a national planning framework within which those decisions are made.

**David Wilkes:** Could I come in and amplify that? I speak as one of the authors of PPG25 and the guidance to PPS25.

**The Chairman:** Really? We have just asked to get it.

**David Wilkes:** I am pleased to report that many of the provisions of PPS25 still exist through the National Planning Policy Framework. When we were drafting the guidance to PPS25, we attempted to make the concepts as simple as possible to understand. We said that it is the elevation—the height of your property/assets—relative to the likely height of flooding which is really important. We worked on a sequential test and a vulnerability test, and what we tried to enshrine within the guidance is the principle that the most vulnerable property/assets—hospitals, electricity substations, residential bungalows for elderly or infirm people—should be chosen deliberately to be sited in areas of the highest elevation, and then there is a cascade down and, as the vulnerability decreases, you can have offices, shopping precincts and car parks, which it may be more acceptable to flood occasionally, right down to open water space for sailing and recreation, which is entirely flood-compatible type land.

One of the underpinning principles is that you need to look very carefully at the levels of where you want to do your new building. We were mindful that there are economic forces and existing development and you cannot be absolutely pure, so there was the concept of the exception test. Although there are some undesirable characteristics of potentially developing in flood-risk areas, on balance, there are social, economic and existing land use reasons whereby, knowingly, you will accept that development.

My observation, since we were writing those policy statements 10 years ago, is that it is applied in a fairly patchy way dependent upon which local authority you have, the skills and competencies of the planning officers and the understanding of planning committees.

**The Chairman:** Where do the insurance companies come into this, because the fact remains that, if you are going to buy a new house, you would want to know the risk, and, if they say it is high risk or low risk, surely that should be available to all of us?

**Tony Grayling:** I confess that is not my area of expertise.

**The Chairman:** Just as Mr and Mrs Ordinary in the street, so to speak.

**Tony Grayling:** I think that incentives should be built into insurance policies for householders to build resistance and resilience measures into their homes. I believe there is an aim to build that into the new Flood Re scheme, but I confess to not being familiar with the details of that.

**The Chairman:** That is interesting.

**Q289 Baroness Rawlings:** I wanted to follow up on an earlier question very briefly. It all sounds wonderful and there is the admirable policy today to build the houses that are desperately needed. I have visited a few housing developments, and none of them has gardens, and there are very few trees and more and more concrete, as you were saying. I imagine that is because of the cost to the developers and they do not want to waste land on gardens that people do not seem to want because of the upkeep. How does this pass the advisory capacity that I see you have? To bring in insurance, surely insurance is vital for any of these developments or any new houses? That might be hugely expensive, with the very sophisticated, special draining systems that they have now that do not allow any natural seepage. What is your view on that?

**Tony Grayling:** For a major development, our advice is bespoke, so we would tailor it to the particular proposed development.

**Baroness Rawlings:** “Major” means what?

**Tony Grayling:** More than 10 houses. The National Planning Policy Framework first of all steers development away from high flood-risk areas and, as David was describing, there are the sequential and exception tests where, if there is a proposal to go ahead with a development in somewhere at significant risk of flooding, then you have to be able to demonstrate that development is really necessary, that it could not be put somewhere else, that it is safe, that resilience has been built in and, indeed, that it is not adding to the flood risk for existing properties. Our advice would cover all that. The planning guidance also says that preference has to be given to sustainable drainage systems as part of that. The advice of ourselves and the lead local flood authority would cover that.

**Baroness Rawlings:** So you would prefer sophisticated drainage to having any grass or trees?

**Tony Grayling:** The drainage system can include water storage areas and areas where the water can filter into the environment, which may be through grass in some cases.

**David Wilkes:** I agree with your point. It is well understood that rain falling on vegetated areas has more chance of soaking in and being stored within the catchment. At a macroscale, if the house builders and people are choosing to have smaller gardens and maybe porous areas to park cars, then one of CIWEM's recommendations is to counterbalance that with the provision of more parks and more open space. If people live in high-rise flats, then maybe they should be within five or 10 minutes' walk of public open space, where there are the health and recreational benefits, and there is a mimicking of natural water movement through the catchment, through that green and open space.

**Q290 Baroness Andrews:** Can I broaden this out beyond flood risk and talk about the co-ordination of environmental assessment and impact? Mr Grayling, you said something about patchy implementation across local authorities, which I presume would apply to the way environmental impacts are weighed up anyway. It has been argued by other witnesses that within the planning framework we have now moved away from assessment of planning based on land use and capabilities and choices to contestability and viability due to housing pressures and so on. There is a question there of whether environmental impacts are being sidelined or parked while we get on with other priorities.

The third thing we have heard is that the loss of spatial policies is making it extremely difficult to plan across boundaries and across sectors, which again would have an impact on your ability to make your voice felt in big infrastructure schemes or even housing schemes. It all seems to be adding up to a situation that was never well co-ordinated but which is now more fragmented and more likely to reduce your ability to influence planning as a whole—positive planning, or indeed even defensive planning. Is that too negative a statement?

**Tony Grayling:** I think the framework is good. The National Planning Policy Framework instils the principles of sustainable development within it. It sets out some of those principles quite clearly and seeks to balance the different objectives of development, which are economic and social as well as environmental. Planning policy guidance seeks to do that as well. I would say that the proof of the pudding is in how that framework is implemented, particularly at local level. The local plan that a local authority is responsible for producing is absolutely key, in our view, in ensuring that there is a spatial plan for that area and also in ensuring that it is joined up with neighbouring authority areas. As you know, there is a duty to co-operate.

**Baroness Andrews:** Is that working?

**Tony Grayling:** By and large, it is working. You will probably be able to find instances where it has not worked well, but you will find instances where it does work well. The framework is there, but it needs to be well implemented, and that requires ongoing attention. It is not a one-off event. We feel able to play our role in providing advice at various levels, and that includes providing advice on the local plan as well as advising at national level the shape of our responsibilities in relation to national planning policy. We are also a statutory consultee on nationally significant infrastructure projects. Major developments also require environmental impact assessments, and we provide our advice on those as well.

**Baroness Andrews:** In recent years, have you lost capacity? Has your budget been cut?

**Tony Grayling:** Our budget has been cut. That is an absolute fact. We have had to find ways of carrying out our responsibilities more efficiently, and targeting our resources so that we give advice on the most important things.

**Q291 Baroness Andrews:** How concerned are you that you are not able to give advice to the smaller local authority, for example, with a big challenge? How do you prioritise your advice? If you are now having to prioritise your advice in different ways, as many arm's-length bodies are, how do you make those choices?

**Tony Grayling:** We make those choices on the basis of environmental risk. We target our bespoke advice on major developments where there are significant environmental impacts and significant flood risk issues. We have adopted a system of more standard or standing advice for smaller developments and ones that are less risky.

**Baroness Andrews:** So you are still a statutory consultee in every intent and purpose, but for smaller—

**Tony Grayling:** Not every. It is quite a complex picture as I was describing earlier. It needs a bit of rationalisation, in our view.

**Baroness Andrews:** Are small developments required to come to you for advice or not?

**Tony Grayling:** Not minor developments, no.

**Baroness Andrews:** So 10 and fewer?

**Lord Inglewood:** Is “minor” below 10 houses?

**Tony Grayling:** Fewer than 10 houses, unless there are very specific issues, for example critical drainage issues or high flood risk.

**Lord Inglewood:** I wondered whether “minor” was being used in the sense of extensions or garages. I am now clear what you are talking about.

**Tony Grayling:** We tend not to be consulted on things as small as extensions.

**The Chairman:** You have a huge amount of experience in giving advice, and sometimes it may be taken and sometimes it may not. I have been struck by a couple of our site visits. On one of them, it looked as though they had this particular issue well sorted. They had a water feature that took off the water that was lodging on flat roofs, et cetera. Do you have a catalogue or some sort of reference, even on your website, to say, “If you are thinking of building, do think about this and look at the way X in Nether Stowey or somewhere has dealt with the advice that we gave them freely”—or whatever—“It is not only a nice thing to have, it is pretty essential, and long term you ought to be thinking about that”? What I am trying to say is that the general public gets bombarded with stuff and we do not know how much is important and how much is merely nice to have. You must be the repository of all this, so should you make it available and would you make it available, and is this an area where the Government should encourage you to make it available?

**Tony Grayling:** We try to promote good practice and best practice. In partnership with Natural England and others, we have published a handbook for that. Again, it is an evolving situation, but we are always trying to promote case studies that show good practice.

**The Chairman:** Good. And is uptake okay?

**Tony Grayling:** The honest answer is it varies, because there is a tendency to do the minimum that complies with our advice rather than necessarily going to the next stage, but there are lots of examples of good practice.

**Q292 Baroness Young of Old Scone:** The Earl of Lytton talked about one aspect of sustainable urban drainage and the issue of retrofit and why that had not happened. Can we look at the whole issue of SUDS? Is the policy working well and does there need to be any strengthening of planning policy? There is the issue of SUDS maintenance, which was always a big challenge. It is comparatively easy to get planning authorities to introduce SUDS, but who looks after it after it is in, because it is there for ever?

**David Wilkes:** I believe that SUDS is a very sensible precaution. It is motherhood and apple pie. The technical advice and the landscape ideas are all there but, as you say, take-up is slow and disappointing. I would like the country as a whole to say, “We are going to grasp this and make it work”, and we should not be too afraid about what the likely maintenance costs are. We have universities across the land and we have joined-up thinking across the institutions that this has to be the way forward.

**Baroness Young of Old Scone:** What changes in policy would you like to see to make the implementation of SUDS more universal?

**David Wilkes:** Ultimately, for the lead local authorities to show leadership, to say that this is what will happen and to get to grips with it. We learn with experience how we operate and maintain those systems.

**The Chairman:** Are you looking for statutory recommendations, in other words, not leaving it to the councils but the Government saying, “This is what we have to do”?

**David Wilkes:** Professionally we have been thinking this way for 20 years.

**The Chairman:** And nothing has happened?

**David Wilkes:** We have seen in other countries—Australia, mainland Europe, North America—much better uptake of these systems because in those places there has been just a bit more confidence to say, “This is the right thing to do. We will do it. We are not going to end up with increasing the national debt if something goes slightly adrift in our forecast of what it would cost to maintain it”.

**The Chairman:** That is very useful. Thank you very much indeed.

**Q293 Baroness Young of Old Scone:** Perhaps I could add another question before Mr Grayling responds. We have in the Flood and Water Management Act a provision for statutory implementation of SUDS that has never actually been commenced. In your view, should it be a statutory provision, because relying on the good will of local authorities may not have the right effect?

**Tony Grayling:** The Government decided to go down a different path and not to implement SUDS advisory bodies as proposed and for which there is provision in that Act, as you rightly say. It has taken a while to get the framework in place, but there is now a good framework. It is different from the one the Act proposed, but at the heart of it again is the lead local flood authority providing advice as a statutory adviser to district councils in relation to proposed developments. We have been working alongside the lead local flood authorities to ensure that they have the capacity and skills to take on this task, and, by and large we do. Defra published the guidance in April of this year and the framework is a little untested, so I think we need to give it time to see whether it is working properly, in the same way that we review whether our flood advisory statutory role is working properly. We need to take a look at whether the advice given by lead local flood authorities is taken up in planning decisions.

I think there is also a key issue, as Baroness Young has said, in relation to the ongoing maintenance of sustainable development schemes once they have been implemented, and that requires resources. In the Environment Agency we have also been thinking about whether there could be some incentives for householders or developers in relation to this. One idea, for example, is lower water bills for developments that have sustainable drainage schemes because they are putting less pressure on the existing water infrastructure, which is therefore reducing costs to the water company, but I think these things need further thought, and at this stage it is just an idea.

**The Chairman:** Could you not enlarge it and come up with a great proposition? If we are so behind other countries in doing this, why do we not get a move on? It is lovely to say that it is nice to have, but just say, "Please, we need it".

**Tony Grayling:** We are constantly working alongside our colleagues in Defra—

**The Chairman:** Tell them to get a move on.

**Tony Grayling:** —to improve policy. As I say, it has taken a while to get the framework in place and we need to give it time to see if it is working or will need further review.

**The Chairman:** Time rather than a kick. Lord Lytton, do you want to come in on this?

**Q294 Earl of Lytton:** I am sorry to come back to another aspect of this. In the context of the very large number of homes that we are being told are required, some of which will be new build, some of which will be secured by conversions and permitted development and things like that, I am interested to know how your advice as to best practice on matters of surface water drainage feeds through into the development control process, given this pressure from on high for these new things. You say that you are a consultee. What is to stop your advice being overridden by other factors? How quickly would you be able to step in and remedy that situation if, for instance, a quarter of a million homes are built per year over the next five years?

**Tony Grayling:** I guess the proof of the pudding is in the eating, and we keep an eye on it constantly. Every year, we review how effective our advice has been. In the last year for which we have full data, 2014-15, our advice on flood risk was taken in 98% of cases. In other words, the outcomes of the planning decisions were in line with our advice in 98% of cases. Our advice goes wider than flood risk for new homes and, if you look at our overall advice, outcomes in line with our advice amounted to 96% of cases. That includes our advice on water resource management, waste water management, land water and quality. Advice

on sustainable drainage comes from the lead local flood authorities, not from us, and they probably need to put in place similar monitoring arrangements for understanding whether the advice they give is actually taken by district councils in making their planning decisions.

**Earl of Lytton:** Is that something Mr Wilkes would agree with?

**David Wilkes:** I do not think there is any more I can add to that; I agree with it.

**Q295 Lord Inglewood:** You said earlier that if you thought your advice was not going to be adhered to, and you really felt strongly about it, that you could approach the Minister with a view to getting a call-in. Is that a frequent happening, or is it a very rare occurrence in practice?

**Tony Grayling:** It is a relatively rare occurrence. It only happens in a handful of major developments each year, and then of course it is up to the Minister.

**Lord Inglewood:** Do they tend to listen to you?

**Tony Grayling:** I hope they listen to us, but of course Ministers are weighing our advice as an expert adviser against other local democratic factors and it is up to individual Ministers to balance between those things.

**The Chairman:** Reverting back to what you said about good practice being spread, when you have successes with these bigger cases, do you make a big song and dance about it so other councils realise they should be doing it? Imitating the best.

**Tony Grayling:** We try to within the limits of our resources, as I was describing earlier. We also work with developers, and, alongside Natural England, we have a forum with the major developers where we are regularly discussing these kinds of issues and the design features we want to see them incorporate into developments.

**The Chairman:** You could be the heroes of the sector and get a gold star.

**Tony Grayling:** That would be nice, but it requires constant attention to get a gold star.

**Q296 Baroness Parminter:** On that point, Mr Grayling, you said you have a forum with the developers and that is going well. Might it be more effective if that was a process that was led through DCLG and there was clear guidance to the developers about what standards were required to meet resilience requirements in the future?

**Tony Grayling:** To be clear, the forum was set up by Natural England, and congratulations to Natural England for doing that. We have joined in, and DCLG is also invited to that forum. During all this the developers have to operate within the framework of the National Planning

Policy Framework and the planning guidance, upon which we also advise, as well as the local plans that are put in place.

**Baroness Parminter:** Indeed, but I want to press you on this. The guidance is very high level. It is strategic objective level rather than providing clarity. As the Chairman was saying, we want to promote best practice, so would it not be better if there was clear guidance from the department that could assist developers as they look to meet the resilience requirements of the future?

**Tony Grayling:** We have published that kind of best practice guidance.

**Baroness Parminter:** You have?

**Tony Grayling:** Yes, in consultation with government departments we developed a handbook and we have published it.

**Q297 Lord Inglewood:** We all know there is enormous pressure for more housing. At the same time, as recent events have shown, it is not a good idea to build houses where they might flood. Is there any obvious way of getting round this problem? Clearly, if you do not build on certain sites, you have to build somewhere else, and you then run into all kinds of other planning constraints. We are a relatively small country with a large population, compared to many. What is the way of getting out of the vicious circle?

**Tony Grayling:** I honestly believe that the National Planning Policy Framework and the associated guidance provides the right framework for reconciling the different pressures on development and the different objectives you are trying to achieve.

**Lord Inglewood:** It is not a structural, systemic policy problem; it is a much more specific, site-by-site assessment where we think things may be going a bit wrong.

**Tony Grayling:** I am not sure the degree to which you could argue they are going wrong, on the basis of our data, which is that our advice is taken in 98% of cases where there have been developments.

**Q298 Lord Inglewood:** In the recent flooding in the north-west where I actually come from, a lot of the houses that have been flooded are not new houses but old houses, and that poses a completely separate problem about how you deal with a set of circumstances where the incidence of possible flooding suddenly becomes much greater than before. What do you do about it?

**Tony Grayling:** I agree with you that existing housing and development is a different problem and an increasing one in the face of a changing climate which is increasing flood risk

in various ways. You have to deal with that by looking at whether you can cost-effectively enhance existing defences or build new flood defences or other types of flood risk management scheme. You cannot eliminate all flood risk, so you also have to look at property-level protection measures and ensuring that they build in resistance to water getting in, and resilience, so if water does get in, the property can rapidly recover. There are costs associated with that and it includes things such as having stone floors and having electrical sockets higher up on the wall.

**David Wilkes:** The height to which you build and the height at which you put other land use is really important. For instance, we have talked about areas of public open space when you have high-density residential living. If that open space is at a lower level to the built property, in extreme conditions the public open space, the grass, gets wet and is out of use for a couple of days, but it is not the end of the world. It is attention to detail on quality design that is really important going forward. As you say, we are a small island and we really need to make every square metre of our land use work for the benefit of humans and wider nature together.

**Q299 Lord Inglewood:** Can I just go back to flood defences? How should the cost of doing some of these major schemes be apportioned? Is it right that the state should pay for it all, or should the affected householders pay for it all? If a new house had flood mitigation measures, then the purchaser of the house would be paying for them. If you have an existing house which suddenly becomes liable to flooding, is it right—and I am not saying it should or it should not—that the state picks up the bill for protecting them?

**Tony Grayling:** We have partnership funding arrangements in place, so in relation to grant funding from us, the state does not meet the full cost of all schemes. There is an expectation that there will be a local contribution, and that contribution can come from other public sector authorities, yes, but also from the beneficiaries and from the private sector.

**Lord Inglewood:** Do you think that is the right way to approach it?

**Tony Grayling:** I think you have to strike a balance in that sense, yes. There is a case for a substantial amount of public funding, but that does need to be balanced by beneficiaries also contributing.

**The Chairman:** But the beneficiaries contribute anyway by way of insurance, do they not?

**Tony Grayling:** The insurance money does not necessarily go to pay for the big schemes.

**The Chairman:** Of course, yes, that is right. Lady Young, you wanted to come in on this?

**Q300 Baroness Young of Old Scone:** I am sorry to bang on about the effectiveness of the current policy. I am delighted to hear that advice from the Environment Agency being implemented by local authorities is now way up in the 90% level. Nevertheless, the Committee on Climate Change told us that 1,500 new homes are built on average per year within areas that are currently at high flood risk, which is a one-in-30 year risk, which is a considerable high risk, and a further 3,100 homes are built within areas with a one-in-100 year flood risk. Thus we are still seeing 5,000 houses a year being built against your advice, presumably?

**Tony Grayling:** There are two parts to the answer to that. We have had a debate with the Adaptation Sub-Committee, whose members are good colleagues and friends, and I think they were to some extent misinterpreting the data when they published those figures, because there is no absolute prohibition on building housing in flood plains. In some cases, it is appropriate if the right design features are put into the development. Even so, in 2% of cases, our advice is not taken so, yes, there are houses being built against our expert advice on flood risk. It is a small proportion, but it happens.

**Lord Inglewood:** You would recommend to any possible purchaser that they should not buy them. Is that right?

**Tony Grayling:** I do not think it is for me to make that sort of recommendation, but I would say that there is a buyer-beware issue.

**Lord Inglewood:** Caveat emptor.

**Tony Grayling:** There is a developer-beware issue here, too.

**Q301 Baroness Parminter:** Pressing on that point a little further—as Baroness Young said, it is a small percentage but a real number affecting real people—your response earlier to Lord Inglewood was that there are costs attached to making these properties “safe”.

**Tony Grayling:** Yes.

**Baroness Parminter:** Would it be your contention, then, that these costs are incorporated into the process such that, if planning permission is given to a developer to build in an area of flood risk, certain resilience measures have to be part of the scheme and they have to be met by the developer, so there is a mandatory obligation for planning applications being granted in those few occasions, as you put it, that are contrary to your advice?

**Tony Grayling:** We would want our advice to be taken in 100% of cases.

**Baroness Parminter:** Indeed. I accept that.

**Tony Grayling:** We also accept that there are local democratic factors that legitimately need to be taken into account. I do not think it is for the Environment Agency to overrule local democracy. The final decision needs to be taken in a democratic manner.

**Baroness Parminter:** With respect, I was not arguing that you should in any way subsume the democratic process; I entirely support that. I am asking whether, if a decision is made contrary to the Environment Agency's recommendations, the costs to make those properties flood resilient should be met in full. You said earlier that you have guidelines for making properties flood resilient. There should be a standard that says that these have to be taken into account and that the costs have to be met by the developer in advance.

**Tony Grayling:** There you are into buyer-beware territory, because you may find that unless those properties have those features built into them, that property will not be insurable.

**Baroness Parminter:** It is too late.

**Lord Inglewood:** A house exists at that point. The developer might catch a cold because he could not sell it, and I would not have much sympathy for that particular developer, but if you happen to be the poor person who has bought it, albeit foolishly, you have suddenly found yourself in a rather damp position.

**Tony Grayling:** True.

**Q302 Baroness Rawlings:** With all that you have described very clearly, are there any other key issues in relation to securing effective water management in the built environment that you would like to suggest that we have not covered, or have we covered it all?

**Tony Grayling:** Our conversation has been quite wide-ranging. If you are talking about major developments, from our perspective it is quite important that right at the outset of conceiving those developments a proper strategic flood risk assessment is made, proper water cycle studies are done, and the local authority and the developer think from the outset about what you might call the environmental infrastructure that needs to be put in place to ensure that development is environmentally sustainable in terms of water use and waste water management, and whether it is properly safe from flood risk and is resistant and resilient. Those are the key issues from our perspective.

**Q303 Lord Inglewood:** On this topic—and I speak as somebody who actually has some land upstream of some of the flooding in Cockerthorpe—if you can establish large areas upstream of houses that you can flood, you mitigate the effect of the water on the dwellings, obviously. Do you think that enough priority is given to making sure that we can increase

areas where water can go sideways in a benign way, because if you can have flood plains and water meadows you can mitigate this problem relatively inexpensively, although it might require payment?

**Tony Grayling:** I think there is further to go in that direction. Landscape-scale flood risk management is going to be an increasingly important feature. Our own approaches require that we look at landscape-scale approaches before we decide whether that alone or that in combination with a physical barrier is the appropriate approach to flood protection. Part of the issue is more confidence in the properties of a wall that retains water than in our understanding of upstream water storage, and I think we still have to learn from experience as to how effective those approaches are, but I think that is the direction we should be going in.

**David Wilkes:** I would support entirely the concept that whatever we can do to slow the movement of water through the catchment has multiple benefits. We have talked about flooding, but there are also benefits for drought, for keeping vegetation, for wildlife—

**The Chairman:** And fishing.

**David Wilkes:** They are all there if you see water as a precious resource and not a threat, and you try and hold within a catchment. Technically, it is more about how you reduce peak flood flows from heavy rainfall through our towns and cities. You almost have two bites of the cherry: you have an attempt through making better use of the flood washlands and the floodplain rivers. We are becoming very good at doing relatively minor engineered interventions to maximise the timing and the amount of storage of water within the valleys and within the flood plains. The second concept is rain falling on the surface of the hills on a catchment and then running off towards the river valleys. There are simple techniques you can use such as planting hedges along the contours rather than across the contours, which will slow down the sheet runoff for all the benefits that I have tried to articulate. Then of course there is the choice of vegetation and trees. Vegetation with deeper roots will help absorb more water and store it over a longer period. Of course there is a tension between that and feeding ourselves and agricultural production. We are back on to some of these weighty issues of how we find a point of balance between what is sensible and what is a real danger to human well-being and our economic way of life.

**The Chairman:** You have painted a very interesting picture, Mr Wilkes. It must be juggling with so many things at the same time. Is it beyond the wit of man?

**David Wilkes:** There is evidence that enlightened landowners and organisations such as the Forestry Commission are really making very positive steps forward. We also have some great academic institutions, which are capturing this science and writing it up. I truly believe that here in the UK we have some of the best ideas and some of the most creative brains, equal to or better than those in other countries.

**The Chairman:** That is encouraging.

**Q304 Baroness Young of Old Scone:** The ideas are there, but the question I would ask—I am unclear and I am seeking after fact—is: who is actually responsible for making sure that landscape-scale, activity and approach happens? Is it the Environment Agency? Is it a series of local authorities collaborating with each other? Who takes the lead in order to get that vision to happen?

**David Wilkes:** From what I observe it is a coming together of minds, it is a willingness of organisations to say, “This seems very sensible”.

**Baroness Young of Old Scone:** What happens if they do not come together?

**David Wilkes:** Then it is not happening yet.

**The Chairman:** A *Country Life* campaign.

**Q305 Earl of Lytton:** We come to the question of the key challenges in relation to the environmental resilience of the existing building stock. Mr Grayling, you have answered the questions regarding making individual properties resilient to flood, and I hope that the guidance is explicit and out there somewhere. I want to look at the other environmental parts—energy conservation, water use, sewerage, surface water dispersal issues—all of which are largely, and necessarily, on a per-property basis. What are the challenges in broad environmental terms in making the existing stock more resilient in that way?

**Tony Grayling:** Your question identifies some of the key challenges in addition to flood risk. We know that climate change is going to affect the distribution of water resources so that we will sometimes have too much of it and sometimes too little. I think we are going to have to become more efficient in how we make use of water resources. Of course, that pressure is exacerbated by new development and population growth as well as the effects of climate change. There are things you can do at a property level to make properties more water efficient by retrofitting measures.

Another key issue is the danger of heat stress as temperatures gradually increase, and of course peak temperatures will also increase significantly. We know that events such as the

heatwave we saw in Europe in the summer of 2003 are likely to become more and more commonplace as a result of underlying climate change, so we will need to take measures to ensure that people do not overheat in their properties. You are right to identify reducing emissions as a key challenge, although, in a sense, that is not about resilience of the individual property; that is about the contribution of the household sector to the UK's overall commitment to reduce greenhouse gas emissions to limit, as part of an international agreement, future climate change. It is a much bigger question in that respect.

I have to say on that latter one we are not the chief adviser; the chief adviser is the Committee on Climate Change. Our core responsibilities relate to flood risk, water management, water quality and land quality. We also operate an advisory service called Climate Ready, which deals with heat as well as those other issues.

**Q306 Baroness Andrews:** I would like to give Mr Wilkes an opportunity to answer the question I asked some moments ago about the extent to which developers are able to implement Code 5 to the highest standards, because that addresses many of the issues about water conservation, heat conservation, lifetime homes and so on.

We live in an ageing population. Quite a lot of attention is being paid to how we make houses fit for older people to stay in, or to building houses that are suitable and desirable so they will move out of houses that are inappropriate and sometimes unsafe. A lot of that is to do with design. Is addressing issues of conservation and resilience in the housing stock part of a policy to promote well-being in general in the environment? Is there a policy issue there?

**David Wilkes:** Perhaps I should confess that I would not style myself as an expert on these matters. I know that Code 5 sets some very ambitious standards, and I would hope to bring it on. Personally, I thought Code 4 set some very high standards, which amplifies the point I tried to make about us having good ideas in this country. Part of my frustration is that we do not get on quickly enough with implementing those ideas.

**Baroness Andrews:** We have a deregulatory impulse at the moment.

**David Wilkes:** There is this continued tendency towards deregulation. Again, it is about the correct point of balance in saying that we are building properties that we would expect to be here in at least 70 years' time, maybe in 100 years' time. Would we want future generations to say, "Why were they so slow? Why were they so backward looking in 2015?" It is about how we get that balance right. We have good ideas.

**Q307 Baroness Whitaker:** We have heard evidence that national government does not join up very well the departments whose interests bear on this, which you have both laid out: economic, social and environmental. We have also seen evidence that the Natural Capital Committee was a useful model in that at one point it brought together a certain number of disciplines. Is there a case for a national committee perhaps on the model of the Natural Capital Committee to advise the Government on all the elements of the value of the built environment and to strike the balance that you refer to from time to time but you do not exactly characterise?

**David Wilkes:** Valuing natural capital is a very interesting concept. I think we are doing well.

**Baroness Whitaker:** We do not have that committee any more.

**Tony Grayling:** It is about to be re-established, actually.

**Baroness Whitaker:** That is very interesting.

**Baroness Young of Old Scone:** It is only for the natural environment.

**Baroness Parminter:** It is not statutory.

**Baroness Whitaker:** I will rephrase my question. Do you think that could encompass advice to the Government on the total value of all the elements of the built environment, or do you think there should be a parallel committee of some sort, or even a person?

**David Wilkes:** I have a dislike of too many organisations. I have a natural tendency to recommend that you try to communicate the right thing to do, and you try to engage people and carry them with you.

**Baroness Whitaker:** Could that remedy the holistic deficit, if I could call it that, which we have heard quite a lot about?

**David Wilkes:** Valuing natural capital can help give real evidence to counterbalance what is a risk of short-term economic and growth tensions—

**Baroness Whitaker:** How is that advice to be brought together and pushed towards the attention of decision-makers then, if there is no organisation to do it?

**David Wilkes:** If you do the work, if you gather evidence and get the data, then you are able to present it.

**Baroness Whitaker:** Who is doing this then? Is it separate institutions? Who or what is going to bring it together?

**David Wilkes:** It is coming together through the universities, through taxpayer-funded research and through the committees, I believe.

**Baroness Whitaker:** You do not think there needs to be a co-ordinating mechanism or person?

**David Wilkes:** I would look first to existing mechanisms and encourage people to listen to what is happening on matters that are relevant to their present responsibilities.

**Tony Grayling:** I think it is an interesting idea, although I have to say it is not one the Environment Agency has taken a view on, so I do not feel I can say one way or the other whether it is a good idea. I do not think you could join it to the work of the Natural Capital Committee. One of my other responsibilities is leading the Environment Agency's work on natural capital. It is focused on the natural environment rather than the built environment, and I do not think it would make a good fit. If you were going to establish such a body, you would need to think carefully about how its remit related to existing bodies' remits. For example, the Adaptation Sub-Committee of the Committee on Climate Change, in relation to the resilience of the built environment, already covers those issues. Are we lacking a holistic approach? We might, but that is not because there is not the potential within the existing framework for there to be one. The National Planning Policy Framework and planning policy guidance are the vehicles for integration in this arena.

**The Chairman:** We have come very close to this decision in some of our previous sessions and it is always ends up with the word "leadership". There is no doubt that there are people out there who could build things together. It could be the Chief Scientific Adviser. It could be anybody. If you have any further thoughts on that, or indeed on anything else that was raised today, or something that we have not thought about at all, we would be very grateful for a few scribbled words. We do not want take any more of your time, but it has been a fascinating session. I am sure I speak for the whole Committee when I say thank you very much. You have engaged brilliantly with us all, so thank you.