

Environmental Audit Committee

Oral evidence: Flood resilience in England, HC 550

Wednesday 9 July 2025

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[Watch the meeting](#)

Members present: Mr Toby Perkins (Chair); Olivia Blake; Ellie Chowns; Barry Gardiner; Alison Griffiths; Chris Hinchliff; Blake Stephenson; Alison Taylor; Cameron Thomas; John Whitby; Sammy Wilson.

Questions 318 - 391

Witnesses

[I](#): Philip Duffy, Chief Executive, Environment Agency.

[II](#): Emma Hardy MP, Parliamentary Under-Secretary of State (Minister for Water and Flooding), Department for Environment, Food and Rural Affairs; and Dr Sebastian Catovsky, Co-director, Floods, and Water, Department for Environment, Food and Rural Affairs.

Written evidence from witnesses:

[Environment Agency](#)

[Department for Environment, Food and Rural Affairs](#)

Examination of witness

Witness: Philip Duffy.

Q318 **Chair:** Welcome to the latest meeting of the Environmental Audit Committee. I am pleased to say that today's meeting will be on the subject of flood resilience. We will be hearing in the first panel from Philip Duffy of the Environment Agency, and then in the second panel from Minister Emma Hardy. Welcome, Mr Duffy. Thank you for joining us. Can you start by explaining the role of the Environment Agency with regard to flooding and your own role within it?

Philip Duffy: Thank you, Mr Perkins. My name is Philip Duffy. I am chief executive and accounting officer for the Environment Agency, a 1995 creation as an arm's length body.

We do three things on flooding. First, we are a tier 1 responder under the Civil Contingencies Act 2004. We discharge that duty through our work with the local resilience fora and in responding to flood emergencies. Secondly, we are the principal infrastructure operator and builder of flood defences for coastal and fluvial flooding across the UK. There are currently about 270,000 assets around England that protect communities against flooding.

Our third role, under the Flood and Water Management Act passed in April 2010, is to maintain a strategic overview of coastal and fluvial flooding. We discharge that strategic overview role in many ways, principally by modelling risk for the country—we recently issued our latest national flood risk assessment. Secondly, we publish a statutory flood and coastal risk strategy; the last was published in 2020 and the next is due in 2026. Other risk management authorities and actors working in flooding must have regard to that strategy in the discharge of their duties on flooding.

Thirdly, we provide a wide range of support, alerts and warnings. We have a partnership with the Met Office to deliver that, the Flood Forecasting Centre. We also have a national hydrometry and telemetry service, which delivers flood warnings right around the country during flood events. We provide a significant level of advice and services, including training to local communities. We have online hubs for things like surface water flooding. We work closely with the relevant directors in local authorities to provide technical support for their duties.

Last, as this Committee knows, we are also a statutory consultee for a variety of applications for the land use planning system. That is mostly when you are looking to build in one of our higher risk areas, particularly categories 2 and 3. We also have a role as a consultee in things like environmental impact assessments and some strategic planning where there could be an interface between land use and flood risk. That is an overview.



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Q319 **Chair:** Lovely, thank you. You referred to the flood and coastal erosion strategy. Although, as you say, it will be strengthened or looked at again in 2026, we have heard evidence that it should be strengthened further and have specific binding targets in there, so that flood schemes move out of the political arena and there is more transparency about how things are chosen. Regarding the advice that you provide to Ministers, do you think that it should be strengthened further in line with the increasing risks that we are all aware of?

Philip Duffy: The first thing to say is that the 2020 strategy was quite a big evolution in thinking in England about flood risk. It was the first time that the Environment Agency had talked about the need to work closely with local communities on adaptation pathways, accepting that in some communities in some locations there are limits to what heavily engineered flood defences can do, and there was a need for thinking about alternatives such as natural flood management schemes.

If you look at the action plan we issued following the 2020 strategy, you will see detailed milestones, including the £25 million investment we announced in 2023 in natural flood management schemes, which in turn has set up the first 38 such schemes across England. That has been an important milestone, and it also represented the first time we talked about flood risk and climate change together and how the two interrelate.

On the next steps, we are doing this in quite a sequential order. The first step for us was to refresh the flood risk assessment with more credible climate science. It was a major undertaking to do that modelling, but it has enabled us to give much more detailed views on how climate science is interacting with flood risk across England, not only on things like classic river flooding but also summer storms and groundwater and coastal erosion.

The next step for us in thinking about the strategy is to work out by a process called the long-term investment strategy scenarios what the nation needs to spend—I stress the nation, rather than the Treasury or taxpayer—to mitigate or maintain those risks either at a broadly common level or on a reducing pathway. We last did this four years ago. We concluded for the then Government that they had to spend around £1 billion a year to keep flood risk broadly flat, and that is in fact what the previous spending reviews did. You can see in the data that that has been borne out in the results.

The third stage for us is then turning that into a strategy that sets out how to execute it. We have done a lot of work with the Government this year in the context of the spending review to look at how we might evolve our strategies for spending on flood defences. There are a couple of big shifts in that that might be worth flagging for the Committee.

First, as we have been saying to the new Government over the last year, it is important to maintain your existing flood defences as well as to build new ones. It is greatly cheaper to maintain a current asset than to rebuild



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it after it has collapsed, causing damage to a community, and the balance of new construction versus maintenance or replacement of existing flood defences probably needs to shift. That is at the heart of the spending review. It will change how we are doing our flood risk profiling.

The second thing that comes out of NaFRA2, which I think is quite striking, is that although the number of homes that run the risk of being flooded from a river remains broadly constant—albeit that some people may flood more often with climate change—the startling increase is in the number of homes that might face the risk of flooding from surface water. That number has increased to 4.6 million by 2050. Many of those homes are not in places people think of as having a flood risk; they are not necessarily next to a watercourse. It is an enormous challenge for all of us working in flood risk to work out how we respond to that and what kinds of measures you need to reduce risk to those households.

That is where we are in the cycle that will feed into a new strategy next year. As part of that, we will look very closely at things like whether our models are coping with climate change. We saw over last winter that we had some failures in our modelling, so how do we adjust those models to cope with the changing climate? We are looking quite hard at our links to community groups and how we can have outreach, because tackling flooding is very much a team sport between us and local partners.

Q320 **Chair:** If I can stop you for a minute. I appreciate you going into that, but we are possibly moving on to other areas that we will be covering shortly. I just want to push you on whether there should be a statutory binding target within the strategy. Do you believe that we should have binding targets for the Government on the level of flood risk are willing for people to experience, and for them to have a priority list? We saw a similar approach when we visited the Netherlands recently. Do you think we should have statutory binding targets, or are you content simply with the approach that we are taking at the moment?

Philip Duffy: I think that we in the agency are unconvinced by that. I have also been to the Netherlands; I was there in November looking at how they do their flood defences. They have a statutory target that is based around the risk of death from flooding that a typical Dutch citizen experiences in the Netherlands in a year; that target is one in 100,000. They have a very low tolerance of flooding, which is not how we have operated our system historically. We have had more floods than they have had because of their topography and the risk to life they would face in that scenario.

Rather than have a target like that, another way would be, via the modelling we are doing, to say, "Is the goal of the Government and Parliament to keep the risk constant or declining, or are you happy for it to increase over time?" You also have to think quite hard about how you would calibrate that target, because flooding is not just one thing. We have flooding in people's gardens, where it is difficult to say it causes property damage; we have flooding up to people's doors, which causes



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damp and water intrusion; and you have flooding right through a property, making it uninhabitable. They are different things.

No doubt we will come on to that when we talk about property flood resilience, but in reality, we have to calibrate risk against all of those different scenarios. None of them is desirable, but they are different, and a single target that captures that complexity would be quite difficult to construct.

Q321 Chair: The FCERM strategy runs across Government Departments. You are very conscious of it within DEFRA as a result of your specific areas of responsibility. Some people we have heard from previously have concerns about the amount of house building that happens on floodplains, the impact of transport and other things. To what extent do you think that the FCERM strategy is central in the thought processes of other Government Departments, and what are you doing to make sure that they are all conscious of this?

Philip Duffy: In the last FCERM strategy, infrastructure protection was one of the key points—pointing out that it is not just about whether your home gets flooded; if your power supply gets cut off and you cannot travel that is equally serious. That is a significant interrelationship between infrastructure and flood risk.

As I said to the Committee when I was in front of you last week, we have a pretty good track record in the planning system of getting either conditions or refusals on the grounds of flood risk accepted. There have been times when the answer has not been not to build the infrastructure; it has been to build the infrastructure, but you have to put a lot of defences around it. That will be true in areas like electrical supply, where there are fewer options to get the grid to where it needs to go and some have to cross floodplains, so we are pragmatic about those areas.

You do rely on something that worries us, which is the degree to which businesses and other infrastructure providers are doing realistic costings on the level of damage they could experience from a flood event, and whether they should be doing more to self-help in dealing with the problems they face rather than expecting, essentially, taxpayer funding via the Environment Agency to fund those defences for them.

There will never be quite enough money to do what we want to do and at some point we need people to think about how they can protect their companies and businesses. We are in dialogue with the major transport providers, Highways England, Network Rail, National Grid, with big scheme promoters like Sizewell C, Heathrow runway 3, to make sure that they are incorporating flood defences and flood management into their schemes at an early stage.

Q322 Cameron Thomas: The Pitt review recommended that the Environment Agency assume strategic responsibility for all forms of flooding. If you will consider for me the Environment Agency's place within the Department



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for Environment, Food and Rural Affairs and the questions as to the precedence DEFRA is given in the face of Government projects, with that in mind, do you still believe the Environment Agency is best placed to lead that role?

Philip Duffy: We have a very good track record of delivering against that strategic agenda. If you think about the progress we have made, even in the last five years—integrating climate forecasting, sounding the alarm about the infrastructure relationship, thinking about adaptation rather than just hard engineered defences, natural flood management, updating our forecasting, introducing summer forecasting with the Met Office—I think we have done a good job of getting that whole agenda moved forward.

On the wider government, the truth about the EA is we talk not only to our colleagues in DEFRA but to other Government Departments just as much. We are deeply involved with the Department for Energy Security and Net Zero and the Department for Transport in our work. We have a lot of joint work with Homes England and MHCLG on things like new towns and the Oxford-Cambridge arc, and in fact we work increasingly with devolved administrations on things like the development of Teesport and strategic sites in Greater Manchester.

We are out there because we are a national body. We work in local areas up and down England and that gives us a unique perspective on the range of issues we are facing. Also, through our permitting system and through our role as statutory consultees, we have a degree of hard influence on decision making. We use that sparingly and try to come up with solutions rather than block things, but we have used it to good effect in certain areas, so I feel pretty confident about our ability to discharge those duties.

The one area where I think we all need to stop and reflect is summer flooding and surface water flooding. You will know that the other local lead flood authorities, predominantly local government authorities, in some areas are struggling for resources. They have the levers rather than the EA because they are the roads and highways authority and they are also responsible for green spaces, parks and local planning. Making sense of hydrology and making good decisions every day on that is difficult. You have to become alive to these risks—and I very much am. Every time I go around the country, I am looking at road junctions and parks and thinking, “This is not engineered properly. We could do better than this,” so I feel there is something there.

We have done some work increasing our training offer for local government. We have run some seminars and we have a new website on surface water flooding. We are providing technical support to some authorities, but that is an area where we need to redouble our efforts in the next period.

Q323 **Cameron Thomas:** Thank you. I certainly agree on the pluvial flooding



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issue. You mentioned when you introduced yourself that the Environment Agency is a tier 1 responder, that you are a principal builder and operator of flood defences, and that you have strategic overview for coastal and fluvial flooding but not pluvial flooding. A lot of this sounds much more like an operational level headquarters agency rather than a strategic level agency. What changes do you think are needed that would help you to have that strategic level influence? You mentioned talking to other agencies, but you are not above those agencies—if anything, you are subordinate to them.

Philip Duffy: With hydrology, the technical facts matter. You cannot busk whether something will flood or how groundwater works. You know the analysis, it shows what is happening. Anyone making policy in the world of floods, whether that is in DEFRA or elsewhere, needs to listen and have had technical advice and modelling. The people who have the expertise to do that modelling are predominantly in the Environment Agency and a bit in the Met Office. Between us we provide that service for the country.

It is computationally difficult and requires a significant amount of analysis to make that credible. Whoever does the decision making about the budget and the priorities and all those things that we discuss with Minister Hardy and her team, they will need to have strong technical support from people who understand that, and those people work in the Environment Agency.

Secondly, I find no shortage of people who want to hear from us about the risks they are facing in all the projects they are running. There is pretty much an open door between the agency and local government, mayoralities and scheme promoters. Of course, because of our statutory role, particularly in permitting, people do need to come to talk to us to acquire the permits they need to take those works forward. I think it is more of a partnership relationship in some of those key developments, rather than a sort of parent-child relationship.

Last, setting budgets, balancing how much money is available for the country and setting the policy framework are of course matters for elected politicians, not for the heads of an arm's length agency, but we work closely with our colleagues in DEFRA on those issues. An example of that is a recent consultation on the funding formula, where we were arguing for a number of things with DEFRA, such as less bureaucracy at the lower end and more control at the higher end, greater facilitation of natural flood management, and rethinking co-financing to make it work for more deprived and cash-strapped communities in particular. I think we were listened to on those points, and we are happy with where that document ended up.

I do not particularly feel we have lost influence on these issues. What we need to do, though, is to continue to argue our case from a position of technical knowledge, and that is what we will do.



Q324 Cameron Thomas: Thank you. That leads me on nicely to my next question. The Committee has heard suggestions that a single overarching authority on flooding could improve public clarity and cross-system co-ordination. What is your view on that proposal, and would such a model strengthen existing flood responsibilities?

Philip Duffy: When you deal with a flood incident, you have to remember that it is not just a hydrological incident. It is a social and economic incident with a strong humanitarian dimension. A lot of the time when I have been to see people who have been flooded, the impact on them personally, on their mental health and wellbeing, is devastating. Recovery often requires complex multi-agency responses involving social services, housing authorities and the police. I am struggling to see how an agency could combine what we do, as technical and environmental management, with that broader social side. I am a bit sceptical about that.

I do think, though—you have heard this in evidence here—that there is a need for more focus on how we help people during an incident and after an incident, to get the help they need. No doubt you will come on to the phone numbers and the contact points and the complexity of that. We have a split system. That has come up in the Floods Resilience Taskforce that Minister Hardy is chairing. There could be room for more harmonisation around that. Could we simplify how you get help? Could we be clear on how we support people in those responses? Could we do more exercises with local government on some of those areas?

We are members of the local resilience fora and we turn up at all of them. They have just received additional funding for this year from MHCLG to improve their work, their strengths and their capability. That is very welcome. Some of them are superb at this because they live with river flooding all the time; they understand it very well and they know their communities well. For others it is a slightly more unusual problem which they have not traditionally worked with. So I think there is a case for making sure that the Environment Agency and the LRFs are really on top of their planning and response and have a consistent level of response for flooding.

We are thinking a lot clearer going into the summer flooding period now. We have seen the horrific events in Texas and there were serious events in Paris a few weeks ago. We are thinking about how we communicate effectively on the climate risk and what people need to do in the event of severe summer flooding. What are the key messages? Who gives those messages and how credible are they? That needs real focus, and we will work closely on that with the Met Office and our colleagues in the Flood Resilience Taskforce.

Q325 Barry Gardiner: Mr Duffy, when will we be getting formal clarification of the funding for the flood alleviation scheme for the Wembley Brook in my constituency?



Philip Duffy: I do not know about the Wembley Brook.

Q326 **Barry Gardiner:** But you will do shortly, I am sure, and you will write to me to tell me.

Philip Duffy: Sure. I will write to you on that. Would it be helpful, Mr Gardiner, if I say a bit about where we are with the allocation of funding more generally? Is that useful?

Q327 **Barry Gardiner:** It will probably be useful for somebody else who will ask you a question on that, but not for me. You rightly mentioned the mental health impact being devastating on people. That is why the Wembley Brook project—I am grateful to your officers for coming last month to meet me there and to work with local residents—needs to be progressed.

Philip Duffy: Okay. I hear that.

Q328 **Barry Gardiner:** I understand it has been approved in principle, but the funding has not yet been formally allocated.

I want to ask you about assets, and you touched on this already in your response to the Chair. The EA-managed high consequence assets were not at the required standard. The 94.5% that was agreed last year was down to 92.2%. If you look across the whole of the network, we are talking of a drop from 97.9% just six years ago to 92.6%, so over a 5% drop. It was interesting that you said at the beginning of your remarks to the Chair that we had to make a decision: do we want to reduce the risk or keep it roughly the same, or do we want to let it slide? Well, it seems that at the moment, we are not taking a decision on that. It is just happening. It is sliding.

The first thing is about those degrading assets that are not in the required—it does say “required”—condition not being repaired due to lack of funding. That is revenue funding. Do you want a recommendation from this Committee, which would chime with what the Public Accounts Committee said in its report, that you should have flexibility to use any capital underspend where you have not been able to expend the full amount and transfer that to your revenue budget, so you could do maintenance?

Philip Duffy: Mr Gardiner, you are right, there has been a long-term decline in the condition of the assets. The modelling we did about what is the optimum level in value for money says that around 98% should be in good condition because that is the balance between reducing all costs and the risk of failure and the right value for money pathway.

Actually, the issue is a combination of not having enough revenue funding to fund this maintenance, because it is revenue funding rather than capital, and having had record-breaking weather which has damaged our assets. A lot of our embankments have been damaged by having such high water levels, for example. We have been prioritising



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what we call high consequence assets—the ones that essentially protect homes and businesses. They have been prioritised first.

There is some good news. With the agreement of DEFRA, we allocated £72 million for asset maintenance for this year, 2025-26, on top of the baseline of £215 million that we had. That has had a result and has slightly raised the performance nearer to 93%. We are at 92.8% as of today, in good high consequence assets.

If you look at the shape of the spending review, we have looked at where the entire asset base needs replacement, which could be capitalised, rather than simply doing routine maintenance, which is clearly RDEL. That gives us the scope to do more asset replacement and maintain those assets at around the 93% level going into the next period.

I would like more flexibility and more RDEL to make these assets stronger, but suspect I am not going to get it, Mr Gardiner, because that is not how the public finances operate. In the meantime, I can assure you we are focusing all of our efforts on getting us as high as possible. We are also making sure that the really critical things like the barriers you will have seen around the country in York, Hull and London, are being maintained.

We have also raised our game through a thing called failure mode and effects analysis, looking at all the ways in which we could have a problem with our key high consequence assets and making sure that we are match fit and exercised to fix those problems.

Q329 Barry Gardiner: If we can just disaggregate for a minute, can you give us the percentage for the high consequence assets and for the assets as a whole?

Philip Duffy: I do not have that number, but it is very much higher than 92.8%. I can write to you with a breakdown if that is useful.

Q330 Barry Gardiner: Thank you. I want to look at the capital funding programme for flood defence that you touched on in your remarks to the Chair at the beginning. Severe weather from climate change is impacting on flood defences, and defences that were deemed adequate in the past are increasingly not as we go forward, because of storm surge swell and fluvial volume increasing. How many of your assets—let's just focus on high consequence assets here—are in good condition against 100% for what they were expected to deliver when they were new, and secondly, against what climate change will demand of them in the next five to 10 years?

Philip Duffy: We do not cut our numbers quite like that. You are nevertheless correct.

Barry Gardiner: But those are what we need, aren't they?



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Philip Duffy: It will vary, is the answer, and you are right that in some places, in some watercourses, the current level of protection will be inadequate. If you look at the delta in NaFRA2 on fluvial flooding and the modest increases there, that is largely accounted for by the fact that we do not assume we will upgrade the defences, so more people will be at risk because there will be more rain and higher water levels.

There is a related problem, as we saw in south Manchester on the Mersey on new year's day this year, unfortunately, where there was a combination of record-breaking weather. The Mersey was 50 centimetres higher than its previous highest recorded level. It is a large river and that is a lot of water. That led to the collapse of an embankment that caused severe flooding and could have caused loss of life had it not happened in the early hours of the morning. That combination of events is really worrying.

To fix that we need to make sure our modelling understands where we have to upgrade the defences. For example in our work on the Thames, including the defences right outside this building, we know we have to raise the common defence standard between now and 2070, and we are thinking about how we do that. We will do that also on most of the main strategic rivers. There is a relationship between those two things. The NaFRA modelling assumes that no new flood defences are built, so the point of departure is, "With this level of flood defences, what would then happen?" and the answer is more people would flood more often, but we have choices about that and we can change that in various ways.

The other thing I need to say is that some of our major defences—the Humber, the Lincolnshire coast, parts of our London defences—will be life expired in the course of this century and will require replacement, and the replacement probably cannot be like for like. It will need to be higher, more engineered and more costly. We will have to work quite closely with communities to help people to understand what that will look and feel like.

For example, if we decide to raise the common defences in London, that will mean that there are choices about how to access the river, how you see the river and how you experience the river. If you want to see what that would look like in reality, you can take a look at what is going on currently in Woolwich, where we are trying to plan with the authority how you put flood defence in at a higher level without a barrier, because they are below the barrier level.

That is a quite hard set of messages that we have to work through across the system, but you are right that there is a relationship between maintenance and climate change.

Q331 **Barry Gardiner:** The Public Accounts Committee said in its report that you as an agency were forecasting that you would provide protection for at least 40% fewer properties than planned. The recommendation in the Treasury minute response was that the agency should include a robust



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forecast of the number of properties that will be better protected by 2027 and they specified that that should include properties in rural communities. Is that robust forecast detailing numbers of properties taking account of all the risks that have been identified; is that number of properties something that you are now able to deliver?

Philip Duffy: There are two parts to that. There is looking back and looking forward. Looking back, the NAO was correct to say that the outturn from the previous floods programme was around 40% lower than the forecast. That is in the main, but not exclusively, due to high inflation, since the agency has a fixed cash budget and many things we are buying, particularly fuel, concrete and steel, increased in price dramatically over that period. There are other factors too.

Q332 **Barry Gardiner:** Does that not mean that you should be going for soft green engineering rather than concrete and steel wherever possible?

Philip Duffy: Quite possibly, Mr Gardiner. That is a very good point. Looking forward, of course we have a slightly different programme in future. The national infrastructure strategy that was published recently by the Government talks about roughly 840,000 properties benefiting from a 10-year programme. That is not quite a like-for-like metric because some of those properties will have their existing defences replaced over the period, but that gives you a sense of the sort of target we would want robustly over the next decade from the programme. That is, of course, barring massive inflationary shocks like we saw with the invasion of Ukraine, but that is the kind of ballpark we are in.

Q333 **Sammy Wilson:** Mr Duffy, you have probably touched on this in one of the answers you gave to the Chairman, but you mentioned the need to change the balance between the capital spend and the revenue spend to maintain the structures we have now. Does that mean that you need your funding from the Government to change from capital to revenue? Does it simply mean that you need more flexibility within your existing budgets to decide what your priority should be in a particular year. How do you see that balance being shifted? How much change do you need to see from capital to revenue to achieve what you are aiming to achieve?

Philip Duffy: We are seeing that shift. For this year, there was a tactical switch of £72 million into maintenance from the capital programme. To give you a sense of where we are with the numbers, the Government have announced funding for us for the next three years, 2026 to 2029. That is £4.2 billion for flood defences, £2.7 billion of capital and £1.5 billion of resource, which is a shift in balance across those areas. That is necessary to maintain the level of warning service we provide and to do more maintenance. With those resources, though, we probably will not get back to 98%. That is a bit beyond our reach.

Q334 **Sammy Wilson:** That improves the situation, I suppose, for people where there are already flood defences, but they need to be strengthened or maintained or whatever. What does that do to your programme for the



people who have no flood defence at present and have been promised flood defences? If there is that shift, what kind of cuts are you going to have to make in future programming, or indeed the programming promised at present?

Philip Duffy: It is very important when you have a scheme that is in the advanced stages of planning that you do not suddenly cancel it. To be clear, if a scheme has a full business case or is in construction, it will continue from the previous programme. That is to give reassurance to people who may have those in their constituencies. Looking forward, we will recast the programme. We will look at this and at some communities that are prone to very frequent flooding where an engineered solution would be prohibitively expensive or just look very strange, because it would consist of extremely high walls or make life in that community very difficult. I have talked to a lot of Members of Parliament about those areas.

There are options. We will probably come on to property flood resilience. It is not an answer for everyone and everywhere, but it might help. We are also looking at things like natural flood management options, which can be beneficial. They can slow the flow, reduce the intensity of flood and bring other co-benefits for communities as well. That might be an option in certain areas.

We are making sure that we have shaken the tree for any options we can find—things like more flood storage ponds, on-farm storage ponds. Are there other ideas we can do in a more disseminated way that could give co-benefits, for example for farm irrigation? There are quite a lot of ideas out there that we are trying to work on with communities. I do not think anyone in the EA wants to say no to a community that faces regular flooding. It is a horrible thing to go through.

I just want to say a word about the cost-benefit ratio as well, because I know that comes up quite a lot. It may be true that there are communities where it would be cheaper to buy up the houses than defend them, but a community is not just a set of house prices. It is a place, a community, an economy. I think all of us in the agency are conscious of that and we want to find solutions for those communities, so we try not to be too econometric about some of this.

- Q335 **Sammy Wilson:** One other way of improving the situation, of course, is to look at the whole picture. The EA is not the only body that has flood defences under its control. What collaboration do you have with other flood defence agencies—whether it is local authorities or whatever it happens to be—in ensuring that we get the best value for money by ensuring that you are not doing standalone schemes or that you are not maintaining, say, your assets while somebody else is not maintaining their assets? What is the level of collaboration? I think that Cameron pointed this out earlier. As a strategic body, what work is there with others?



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Philip Duffy: That is a great question, and a lot is under way on that. Over the last period, we had a shift. Most of the defences were previously built by us or by our predecessor organisations—the Thames Barrier is owned by us and run by us—and for the very high consequences, very risky things that might be worth doing, but we are increasingly seeing local government delivering more of our flood schemes and they are doing it extremely well, if I may say so. An example is Portsmouth and Southsea, which is a local authority scheme, really well run. We have seen fantastic work in Leeds with the Leeds flood alleviation scheme, which was a local authority-delivered scheme.

We want to work in partnership with authorities that have ideas for that and often it can be a really good partnership. We have the capital, and they can maintain and that may actually work better for everyone and for the taxpayer. That is an example that we are quite keen to see repeated. We have some good work under way currently in places like Derby with Our City Our River, which is a Derby Council promoted scheme. There is some very good collaboration there.

Secondly, risk management authorities are important. Clearly, in rural areas it is the internal drainage boards that have faced significant financial pressures and the same problems we face with things like rural embankments being damaged through high water and with climate change. They have had more money from the Government, and we are now trying to strengthen our relationship with them, working out who is doing what across the assets and can we help them with pumping and technical equipment and water? Water companies are important for that. In the Manchester integrated water management plan, United Utilities are playing a big role in doing things in its water management that help us with flood risk. That way of thinking, that partnership thinking is important.

Yesterday we published our new corporate strategy. One of our six principles for the EA is being better partners and recognising that, because water is complex and multifaceted, success for us will often look like being a fantastic partner and we will not do the work. Others will do the work, but we will help.

Q336 **Sammy Wilson:** Is there a full register of all of the anti-flood assets across all of the various bodies? If not, is there any work being done to achieve that?

Philip Duffy: Your colleagues in the Public Accounts Committee follow this closely, but we have had our accounts qualified in previous years because of problems with data on the overall number of flood assets that exist across the country. The number I am using today is 270,000 and we are putting a huge amount of effort and money into improving that register. Quite often with flood defences there are lots of changes of ownership, a lot of custom and practice on who maintains an asset, who has access to an asset, who owns an asset, and so on. Quite rightly, they



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are then saying, "Well, where are the title deeds? Who is actually in charge of this asset?"

We are trying to work that through, and that has come a long way. You want a consistent geospatially-enabled map of these assets that gives you the quality you need to work out where your maintenance projects need to be. It would also open up the prospect of doing some swaps sometimes. We could swap between us, a water company, a local authority so we have the optimised packet of ownership. That is really important.

Q337 Barry Gardiner: Just on that, Mr Duffy, neither you nor local authorities actually have the power to find out who is responsible for those flood defences and who owns them. Would it be helpful to have a recommendation from this Committee that gave you and local authorities the authority, the power, to know who actually has those?

Philip Duffy: Possibly. I was dealing with a case recently in East Yorkshire about the interface between the water company, us, the Canal & River Trust. All this happened in the early 1980s and there were no records kept, no one knew. What you are really arguing about is cost, aren't you, saying, "Who is actually going to take this on and keep it mowed, keep it maintained?"

Q338 Barry Gardiner: Some repairs have been done at the Wembley Brook and nobody can say who has actually done them. We know it is TfL, but it will not own up to it.

Philip Duffy: Also, you have to make sure that if you start maintaining it, you are capable of handling the legal liability for that maintenance, you have the right permit structure for it, and you can keep it going on an ongoing basis. I am not sure it is the power. I think it might be about the money and the precedent that is causing some of these problems.

Q339 Blake Stephenson: I have a few questions on planning and flood risk. In Mid Bedfordshire, houses in the village of Malden have been reclassified as being on floodplain following significant development upslope from them. I think that is something that people have experienced across the country. Does the Environment Agency believe the current planning framework does enough to prevent inappropriate development in flood-prone areas?

Philip Duffy: I have asked for information about your constituency in particular. We are not aware of construction in the functional floodplain in your constituency, but if you have any evidence of that we would look at it. It may be to do with surface water runoff in the case you are describing. There is also no main river in your constituency, so we are not actually the relevant risk management authority. It would be the local lead flood authority.

More generally, we can see examples in Bedfordshire and Cambridgeshire of construction taking place in what we would call flood zone 3, which



would be floodplain. We have generally managed to negotiate mitigations for that, but that requires you to raise the properties above the floodplain so that they do not flood. That is an expensive thing to do, but might be the right thing to do. Fortunately we have been successful in those and we are confident that has not increased the flood risk to other properties through our flood risk assessment process.

I said last Monday, Mr Stephenson, that in general we have a good track record of getting our views heard by local planning authorities. There were just over 50 cases in the first quarter of this year where that was not the case: 40 were cases where the construction went ahead against our advice and 11 were cases where construction went ahead but we had asked for conditions, particularly things like evacuation plans, that were not put in the planning advice. That is a worry because we have seen the impact of risk to life of not having adequate plans if you are living in a home that is much at risk of flooding.

Q340 Blake Stephenson: Thank you. My second question follows on from the questioning by Mr Thomas. I noted here that you said that you have a degree of hard influence but you use it sparingly. How often—and you may have answered this but maybe I am picking a bit—is the Environment Agency's advice on a flood risk overruled by planning authorities? Would the agency support stronger powers, such as a statutory right of a veto when you see that there is a specific risk from flooding and the planning authorities are just continuing to approve development?

Philip Duffy: Overwhelmingly we are listened to. To give you some numbers, if that is helpful, in the period between calendar years 2016-17 and 2023-24, there were 2,649 properties constructed in England against the advice of the Environment Agency. In the year 2023-24, there were 89 homes constructed against our advice. That is quite a small proportion of the overall level of homes.

Regarding the roughly 10,000 applications on which we comment a year, last year we had 234 objections where we were concerned about the application but we reached a resolution with the local planning authority. That is the side of the system working. We raise objections when we are concerned and we are generally listened to. In the last quarter we were left with only 51 applications that were not satisfactorily resolved. It does happen but not on a huge scale. There is a little nuance of complexity that we have to be aware of.

Q341 Blake Stephenson: We may talk about a small proportion, so just 51 applications, but these are people's homes and people's lives. People will move into these homes, and it is reasonably foreseeable, from your analysis, that they will be flooded. In those cases, would you like the agency to have some sort of veto so that it is resolved and people do not move into homes knowing that there is a high risk of flooding?



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Philip Duffy: I think you have to respect the role of the planning authority as the ultimate decision maker. There can be justifications for this. For example, the use of the property might be not as a permanent residence. It could be that there are flood defences planned that we are not aware of and cannot take into account. It could be that there is an important overriding public imperative for that development to go ahead. I think it would be a bit peremptory of us to say you could never build against our advice. Clearly, a planning authority takes a risk if they go ahead against our advice and that risk is on them. They are the stewards of their community, not the Environment Agency. It does not happen particularly often, but I would be nervous about undermining the democratic legitimacy of a local planning authority. That is an important principle.

Q342 **Blake Stephenson:** I totally understand. This is my final question, Chair. I know we are under pressure for time. You talked about negotiating conditions in applications. One of the concerns, certainly that my residents have, is that conditions in planning applications are often not followed up. Do you see that there is a role for the Environment Agency to make sure that these conditions are actually built out when permission is given and houses are built? Do you see that as your responsibility to protect those houses to make sure the conditions have been built out?

Philip Duffy: I think that many of my colleagues at the agency would very much share your concern about developers promising one thing and not delivering what they promised. We very much welcome the strengthening of coverage of sustainable urban drainage systems in the latest iteration of the National Planning Policy Framework. We wish to see the SuDS obligation that was in the 2010 Flood and Water Management Act commenced. Section 3 has not been commenced yet. We are really worried about things like water consumption standards being met and making sure they are met before we release water credits, for example, so you are making a very valid point there.

Enforcement of broadbrush planning restrictions can be difficult, and difficult for authorities as well, particularly when you are living in areas of extremely high flood risk. I can give examples where we insist there are no bedrooms on the ground floor, for example, and is that being consistently applied. I think there is a broader issue about the building control regime whether that is actually working currently, rather than for us. However, you are right, there is a risk of developers not living or abiding by the conditions we set.

Q343 **Alison Taylor:** Thank you for coming to give evidence to the Select Committee today, Mr Duffy. I know you have a very difficult job, so I do appreciate you coming along.

I have a few more questions on planning and flood risk. We have heard about the sustainable urban drainage systems, and we have heard that they are often poorly delivered and sometimes not maintained. Do you think the current system is working and have you seen year on year



better engineered, sustainable urban drainage systems? The developers that I have worked with in Scotland tend to be thoughtful about the way they go about these. Are you seeing an improvement in the specifications? Do you think that will continue to improve or the contrary?

Philip Duffy: I do not think I have any evidence to give about whether overall they are getting better or worse. A number of serious pollution incidents we have seen, and flooding risks, have come from poorly maintained urban drains, that is true. They are generally of an earlier vintage and have not been maintained properly. The latest planning policy framework is stipulating they should be incorporated into modern housing design. We are currently working with most of the very large housing schemes, through Homes England and through the New Towns Taskforce, to try to incorporate better nature design and urban drainage from the start into the sites, which gives me some confidence that we are doing better in professionalising these areas.

A slightly trickier problem is not so much in the housing estate world but in urban design, where we do see serious problems, particularly where there is no river nearby, people do not think of the area as being a particularly high-risk location.

Q344 **Alison Taylor:** Do you think the Environment Agency should have a bigger role going forward, in enforcing maintenance of sustainable urban drainage systems?

Philip Duffy: We have argued that it should be a statutory requirement and that if you do not do that you are putting unfair pressure on water companies and raising the risk of sewage pollution. We do not have control of the house building process to insist that these measures are taken into account and the cost of this borne by the housing builder. There is that aspect of it.

Recently we have strengthened our support for local government as planning authorities in asking what does good urban drainage look like and what are the design solutions? There is no shortage of guidance out there. If you went to the Netherlands with the Chair you will have seen they have done a lot of work on how you reduce risk in low-lying areas like Rotterdam. We are not quite seeing that consistent approach being taken to things like highways, park design, public space design, and that is something we definitely can do.

I think there is a desire from many planning authorities to do better on this. A lot of the mayors are talking about this. We have recently seen Mayor Khan in London talk about climate resilience and adaptation and making that central to the design codes he wants London to be built under, so there are willing partners in this enterprise for us out there.

Q345 **Alison Taylor:** Thank you. What approach does the Environment Agency play in embedding property flood resilience within building regulations and planning policy, particularly the existing housing stock, and how can



this approach be improved, enhance uptake and effectiveness?

Philip Duffy: There is clearly an important role for property flood resilience. I just want to say a word of caution about it. We talked earlier about the psychological consequences. There are people who are vulnerable for whom living in a home where they have to adopt and apply property flood resilience is probably not suitable housing for them in the medium term. I think that is an important point to make.

We are working under the Floods Resilience Taskforce with the Cabinet Office on getting a better register of vulnerable people across the UK, so they can be flagged. There may be questions about whether they are appropriately housed, given that they may face very serious flood risk, even if they do have PFR. PFR is part of our product offer but there are barriers to its deployment.

Recently, Minister Hardy commissioned Peter Bonfield to review with the EA how we can improve the offer on property flood resilience. The sort of barriers I am talking about is things like: do you have standardised products that are cost effective? Are people being overcharged? Do the products on the market work and have they been properly tested? Are they regularly incorporated in the right planning conditions for the right zones? You do not want to go ahead and build on a fully functional floodplain with PFR. PFR is used on the margin, where we have very high flood risk. How do you maintain and quality assure over time the PFR equipment? That is a subset of a bigger problem in the UK about the quality of construction materials and oversight, and whether we have enough supply chain to do this work at scale, which Peter Bonfield is looking at. That is an important aspect of thinking about how we can be more effective.

On the scale of yield, I have a number I want to share with you on property flood resilience. We have been modelling how much of a role it should play. In the current long-term investment scenarios, which are now a bit dated, we think about 200,000 homes—about 16% of those at risk of flooding under the previous modelling—could benefit from PFR. That is a chunk that would be worth doing if the PFR was affordable and important.

We are just doing a couple of pilots. We have done these 25 projects under the innovation programme, looking at how we can make these work better. A key finding for me has been it is very difficult to retrofit on historic properties and there are trade-offs to be made between things like conservation status and PFR—for example ripping out an historic door and putting a new door in has a consequence for the planning authority. There is a bit more fine-grained detail that I think Peter Bonfield's report will get us into about how to make this market work better.

Q346 **John Whitby:** We have heard again and again from residents that they do not know who to contact during a flood, and even when they do manage to contact someone, they are bounced from one agency to



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another. What responsibility does the Environment Agency take for the ongoing confusion around this and what is it doing to address the problem?

Philip Duffy: I do think it is an issue. It has been looked at previously, but it is an issue. Given that there may be members of the public and your constituents watching this evidence, we should be clear that, if you have flooding coming into your property and there is risk to your life, you should ring 999. I want to be very clear about that. That is the answer. If you are having flooding and you are in an emergency call 999.

After that it gets more complex and there is an issue for us to look at—and we will look at it. We have the Floodline service—a GB service with our partners, the Scottish Environmental Protection Agency and Natural Resources Wales—which can provide advice about flood risk in your area and where to go for information if you are thinking about being at risk of flooding, and a whole lot of guidance about how you should respond or cope with flooding, including your insurance options. That number is 03459881188.

But—and this is a big issue—if you have been flooded, generally speaking we cannot provide the support you need. We are not able to provide you with housing support or housing advice, temporary accommodation—the whole range of things that you may need if you been flooded, which actually come from a local authority. Where the confusion comes in is, “Well, I have been flooded. EA are the floods people. Can they help?” and often they cannot. That is an area we are looking at.

Could you integrate those services? The principal issue there is how you deal with a spike in demand during a major flood incident and how you provide a service that is reliable. I do not think it is a huge surprise that when we have a major flood incident, we have thousands of calls across our system and coping with that surge is quite operationally challenging for us.

Q347 **John Whitby:** Would you support the creation of a national flood incident reporting line—a first clear first port of call for anyone? I presume they could divert to the various places, but we need a number.

Philip Duffy: It would need to work. You could not have people who are desperate not getting through to a phone line, so you have to make sure it would work. Also, you have to make sure that the local authorities are involved—they are the housing authority, they have the support for temporary accommodation, they can help you with practical issues on the ground and they will be connected to local social services, particularly for the elderly or the vulnerable. That is quite a high bar to cross, but we are looking at the options to make that simpler and easier for people when they have been flooded, which is the main area of concern.

Q348 **John Whitby:** What is the alternative that gives people clarity?



Philip Duffy: The current position today is if you are in an emergency ring 999. If you want advice about flooding more generally, call Floodline wherever you are in GB. If you have been flooded, call your local authority. That is the current answer. The question is: could you make that better? Possibly you could if the service worked.

We last looked at this in detail when we translated the Floodline service a few years ago. We thought it was impractical to cover the sheer range of issues that people who have been flooded need to do. If you look at how the local resilience fora operate, they generally have an emergency services lead during the actual incident because we are dealing with risk to life, and they transition to one of the social directors of the authority for the recovery phase. That is logical because the support that you need when you have been flooded is not what we do; it is about what local government does. That is quite a hard trade-off to make that feel seamless for communities.

We put out flood information officers in flooded communities. All of my desk-based staff have second jobs. They go out as volunteers to talk to communities that have been flooded to make sure that, if you have been flooded, someone will come and point out where you go for support and advice. We are doing our best to make sure we have joined that up at the local level.

Q349 **John Whitby:** So many local flood groups, wardens and volunteers told us that they feel unsupported and under-resourced. What is the EA doing to help those community responders?

Philip Duffy: Yes, I think that is a factor. I have mentioned before that the local resilience fora have had more funding from MHCLG, but the community groups particularly are brilliant colleagues at the National Flood Forum. They are a very small group, operating with not a lot of resources. The question for us is: can we get other people to help finance the support or put more breadth into the operations of groups like the flood fora? We have been partnering up recently with Communities Prepared as a group, which has a wider range of sponsors and funding, and we are thinking about whether there are things that we can do with the Red Cross that would reach a broader range of communities?

The existing flood community groups are brilliant where there are frequently flooded river communities. They really understand because they work well. They do not have the depth of penetration for communities who do not think they are at risk of flooding, so I think there is a genuine issue there around the country that we need to address.

Chair: Mr Duffy, thank you very much indeed for your evidence today. We will bring the first panel to a close and the sitting is suspended.

Examination of witnesses

Witnesses: Emma Hardy MP and Dr Sebastian Catovsky.

Chair: Welcome back, everyone, to the second of today's panels on flood resilience. I am very pleased to be joined by Minister Emma Hardy. Alongside being the Minister responsible for water, she is, like many of us, a Member of Parliament in an area that has been hit by flooding, so she is very conscious of many of the issues we are going to raise. We will start with Alison Griffiths.

Q350 **Alison Griffiths:** Welcome, Minister Hardy. As you will already know, flooding is one of the most immediate and growing climate risks facing the UK. What is the Government's approach to managing this threat and ensuring the country is genuinely prepared for the longer term risks?

Emma Hardy: Thank you, and thank you, Chair. If I may, before I answer the questions, I would like to acknowledge the devastating news coming from Texas and offer the people in Texas my sympathy and support for the appalling flooding that they are facing. My heart goes out to everybody impacted by that. We have all seen the scenes on the news.

To answer your question, one of the first things we have done is set up the Flood Resilience Taskforce. We realised when in opposition looking at this that one problem was the co-ordination across government. The taskforce brings together all four nations of the UK, as well as the Cabinet Office, because it has responsibility for the resilience of the country, MHCLG, because it is supporting in the recovery phase through local government, and DEFRA, alongside the Environment Agency, the NFU, water company representatives and many others because we need to be looking at how we tackle flooding holistically.

One of the first things that we needed to look at was maintenance of the existing assets—I know that that came up in the discussion that you have just had. That was a priority. We had to immediately move money into maintaining some of the assets that we have.

Also, now we have had the fundamental mapping done by the Environment Agency and the NaFRA2, looking at surface water flood risk because before the only flood risks that were documented were those from river or sea, whereas now we have surface water flood risks as well. With climate change, the biggest danger that people face now is from surface water. Now, we have the evidence and the data and the information, because of the excellent work the EA has done. That is helping to inform what we are doing around the flood funding formula and how we are addressing flooding, because we need to think about what we are doing about surface water more than has been thought of in the past.

Q351 **Alison Griffiths:** Yes, I absolutely agree with you on that. How are decisions on infrastructure, housing and land use aligned with future flood risks?



Emma Hardy: DEFRA recently did the land use framework consultation, which looked at land use in general. In planning, it is this new mapping. We encourage all local authorities to have a look at this work that the EA has done when they are thinking about what they want to do in their local area and where things will be built. As the Chair mentioned, I represent Hull, which is the second most flood-prone city in the whole of the country; only London is at greater flood risk than the city of Hull. There are ways to build and develop that do not increase the risk of flooding or cause a risk of flooding to others.

Q352 **Alison Griffiths:** Avoid floodplain, do you mean?

Emma Hardy: Hull is a floodplain. In fact, just one tiny part of Hull is not constituted as part of a floodplain. If you build anything in Hull, you are de facto building on a floodplain. There are ways to mitigate that because we would not want to say to the city of Hull or somewhere else, "You can't have anything ever in your city again because of flooding." There are ways to do this. Lessons could be learned from abroad from some of the work that is happening in other countries as well. The Environment Agency has this new mapping. I cannot stress how important this is and how much I would encourage everybody to look at this, especially local authorities.

The role that local authorities play with flooding is crucially important. I am keen to see all councils continue to have committees looking at what is happening with flooding as an issue up and down the country, because it is so crucially important and they play such an important role in this.

Q353 **Alison Griffiths:** I absolutely agree with everything you have just said. It is certainly an issue in Bognor Regis and Littlehampton with our own district council, but are you looking to legislate for that? What will change between what exists now and how you look to the future?

Emma Hardy: On planning for flooding?

Alison Griffiths: You talked about the role of district councils but, in truth, you have not said anything that specifically will change from what happens today. I know we have a fantastic planning team locally and I am sure you have too. What will change in the imperative going forward?

Emma Hardy: The councils and the district councils are the lead local flood authorities and, as Phil was explaining, they liaise with the Environment Agency. The Environment Agency has been supporting them with training, upskilling and understanding so that they are planning in their local area for what needs to happen or does not happen.

I suppose that bigger point about what we are doing as a Government to address the increased risk around surface water flooding goes back to our funding formula review, which we are looking at currently. That formula is looking at how we address the fact that we are facing more problems



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from surface water. Surface water is one of the biggest risks that we are facing at the moment.

The other problem, as mentioned in the previous discussion, is not just maintenance but upgrading some of the existing assets we have had. As the point made earlier, some of the assets were built 10 to 15 years ago for the situation at that time and were not built for the climate risks that we are facing. We are looking not just at maintaining assets but upgrading some of those assets as well as building new ones, and thinking more about natural flood management. We need to think about that more because we are facing more of a threat from surface water.

Q354 Alison Griffiths: Yes, it is certainly an issue in my constituency. What structures are in place to ensure that flood adaptation remains a priority across the Government?

Emma Hardy: Climate adaptation is a feature of the infrastructure strategy and what we are doing for the next 10 years and looking at the impact of climate for everything, which is not just flooding of course but what we do if everything is hotter and various other things. We need to be thinking about where we have our schools. I was having a conversation with the Schools Minister about how to increase flood protection for schools. There are various other examples right across the Government because—and I have been banging this drum for quite a long time—it is such a risk to everything.

We mentioned the mental health impact that it has on people. Businesses do not always reopen after they face a flood event. It has a devastating impact on the local economy. We experienced it in 2007 in Hull. Anyone I speak to who has experienced flooding feels the same way. You never forget when you have experienced this.

Alison Griffiths: Yes. My constituency is quite similar to yours in that it is a coastal constituency. The impact of sewage is felt acutely in my constituency. Thank you.

Q355 Barry Gardiner: Minister, Baroness Brown came before this Committee as the chair of the Committee on Climate Change's adaptation sub-committee, and said that the UK is not adequately prepared for flooding and the public are largely unaware of Government targets or what they mean for individual households. Do you recognise that?

Emma Hardy: Yes, part of it. The public are not as aware. After the flood events at Christmas, the taskforce did a paper collecting evidence from everyone to look at lessons learned, what went well and what did not. One point that came out that I am trying to find the best way to address is that, even if they sign up for flood alerts and get a flood alert, people do not always know what to do when that flood alert happens. There were various examples of people leaving cars in basements and then cars getting flooded and people not understanding some of the actions that



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they need to take. The general societal resilience to flooding is an area I want to do some work on.

I am keen—I would love the support of the Committee—in Flood Action Week to create emergency food packs for MPs. A colleague had asked me to do that and I promised I would. I will also try to encourage during that Flood Action Week all Members of Parliament to communicate out to their constituents what you need to do when it floods, various things like moving your car and having a flood plan.

Societal resilience to flooding is low. I have heard various examples of people not understanding the warnings and not understanding what to do when the warnings come. That is an issue and I am trying to work out the best way. We do not want to frighten people but we need people to be prepared and know at least that, when the warning happens, these are the actions you should take.

Q356 Barry Gardiner: In response to the Public Accounts Committee's report at the end of last year, DEFRA said it would "develop a measure which shows the net change in the number of properties at risk from flooding in order to give the true picture of England's resilience to future flood and coastal erosion risk and set a target for the net change it aims to achieve". Have you done that?

Emma Hardy: With the new data we have from the national flood risk assessment, the mapping that the EA has done shows us for the first time the surface water flood risk. Previously it was only looking at risk from sea and from river and so now we have surface water risk. In the evidence we have done on the money that we are putting into Government, we are saying that we will better protect 52,000 properties by March 2026 and 840,000 in the 10-year programme.

Q357 Barry Gardiner: The Government always come out with these figures, "Because we are doing this, we will protect this many more properties," but it is not a net figure. They do not say, "In the UK as a whole, 52,000 more properties will be protected," because it does not take account of those properties that have now come into flood risk and are vulnerable. Is that correct?

Emma Hardy: I am happy to go away and see if we can work that out for you because we would have to reset the baseline based on the new mapping and the evidence that we have. Otherwise, you would be comparing apples and pears because we have never before measured the risk of surface water flooding. If you take the surface water flooding into risk in the calculation, we could come back to you with some figures, but you would not be able to compare that to figures from the past because they did not include the risk from surface water.

Q358 Barry Gardiner: Is that why the Public Accounts Committee said that you need to talk about the number of people and the number of houses that are actually affected here? Otherwise, you give us a gobbet statistic,



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"52,000 properties will be better protected as a result of what we are doing," but 100,000 people might now be in greater danger of being flooded.

Emma Hardy: Yes, which is why I am saying the evidence that we have had from the Environment Agency is so important. If you are going to set a baseline for how many properties are at risk, that is what it is mapping. What it has done is crucial. As I said, previously that did not include surface water risk. Some people are saying that so many more properties are at risk of flooding, but they were always at risk of flooding from surface water. It was just before the number was never calculated and was never analysed, but the level of risk was always there. It just was not evidenced.

Yes, for the Committee, I will look at that level of risk as evidenced from the NaFRA2 document and look at the work we are doing to try to get you those figures.

Q359 **Barry Gardiner:** I want to drill down on this because the Public Accounts Committee was driving at this. Information should be clearly available from DEFRA about the number of properties in England as a whole that are at risk from flooding. It does not matter whether it is fluvial, pluvial or coastal, but just that are at risk. Then, as you progress schemes, that risk would be adjusted but, indeed, as climate change adversely affects those properties, it may be adjusted downwards inasmuch as you are working to try to address it in the other direction.

Emma Hardy: Yes, I agree with you. As I was saying, at the moment people can look at this NaFRA2 document. It is publicly available. They can put in their postcode and find out the exact flood risk for their property. That information is now available. It came out at the end of March. People can put it in and they can see what level of flood risk they have from all the different types of flooding. It is there, it is online and people can look it up.

Dr Catovsky: One change in the new national flood risk assessment is that the Environment Agency is able to update it much more regularly, doing exactly as you have just said, and so it will be possible for us to look over time at how flood risk is changing. With the previous flood risk assessment, we were not able to do that. We now have a much more dynamic risk assessment that will allow us to look at investment that is going in but also where development might go in and the impacts of climate change.

Q360 **Barry Gardiner:** Indeed, where we are building homes on floodplains still.

Dr Catovsky: Yes.



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Emma Hardy: For example, if we were to put in a new flood defence somewhere, it would be shown through the modelling to reduce the risk for that area. The EA has done an important piece of work there.

Q361 **Barry Gardiner:** Great. It seems we have been talking about the Pitt review for a long time. How many of the 92 recommendations that the Pitt review made have now been implemented?

Emma Hardy: Forty-three were implemented, 40 were implemented with work ongoing in 2012, six were ongoing with work on track, and only one was not completely implemented or taken forward.

Q362 **Barry Gardiner:** Why do we still, 15 years on, not have a unified framework to clarify the responsibilities for managing all sources of flooding, as the Pitt review called for? We still heard from all the witnesses that came before this Committee that it is a fragmented system with no overall responsibility and that is a huge part of the problem of co-ordination.

Emma Hardy: As Phil mentioned, you are quite right, the Pitt review said that there should be an overview role. The Environment Agency was given that strategic overview role over all the different types of flooding. The EA interacts with all the different bodies that are responsible for looking at flooding. As Phil mentioned, they work with the lead local flood authorities and the local councils. They do training with them and support them. They sit on the local resilience forums as well. They also help set up the regional flood and coastal committees. They work with the IDBs. They have the strategic oversight of everything that happens, regardless of the type of flooding.

Barry Gardiner: The EA does not have the responsibility, does it? It is not responsible overall. The Pitt review called not for an overview but for a unified framework and we are lacking that.

Emma Hardy: The EA's strategic overview role is different, as Phil said, from its operational role managing flooding from rivers and seas. As Phil also explained, it does not have the operational role for surface water flooding; that is done by the lead local flood authorities and the councils, because they should be responsible for what happens in their own patch. The EA's role is to have that wider sense look and, as mentioned, it has the technical expertise and all of the knowledge and liaises with all these different organisations that carry out flood preventative work in their areas.

Q363 **Barry Gardiner:** We have heard that overlapping responsibilities continue to confuse the agencies and the communities and they hinder the effective delivery of flood measures. This needs sorting out. You can say that that is the existing system and that these people have this responsibility and those people have that responsibility, but that is the problem. Every witness who has come before us has been saying this and yet the Government for 15 years—I know it has not been you for 15



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years—has failed to implement the central recommendation of the Pitt review, which was to get this sorted.

Emma Hardy: I definitely agree with you in that local people are not always clear about what they need to do. A few things came out from the lessons learned work we did through the taskforce from the flooding that we had over Christmas. One was local response arrangements and people. One acknowledged that the flood emergency response can be confusing for the public and parliamentarians.

We are looking at what we can do to make that more straightforward for the public. We have looked at reviewing the multi-agency flood plans. We have looked at resilience hub pilots. The EA is trying out resilience hubs at the moment, which are about how to help people before and after. It is doing that pilot work now to feed back to the taskforce to see how effective that has been.

I want to do a lot more communication in Flood Action Week, so I urge everyone to help share our information and the MP emergency pack. As I already acknowledged and mentioned, there is some confusion for people on the ground. At the moment, with the Environment Agency through the floods taskforce, we are looking at the best way to do this. As Phil mentioned, in an emergency, please contact 999 straightaway. It is an emergency.

Barry Gardiner: You say contact 999, but that leads to another problem and that is that the fire service has no statutory responsibility for flooding in England. It does in Northern Ireland, Scotland and Wales, but not in England. If you call 999, you get the fire service, which does not have the statutory responsibility. They do an amazing job and we all recognise that, but because they do not have the statutory responsibility, they do not have a budget for training and so they cannot train on this stuff.

Emma Hardy: We are looking at whether they need a statutory responsibility. I went to see them in Liverpool at their training centre, which was amazing and incredible. The fire service was showing me some of the work they do with rescuing people from flooding, the boats that they use and the dog, Luna, who was very sweet and went out to find somebody hiding. We are in conversation about that.

Q364 **Barry Gardiner:** Would it add grist to your mill if this Committee made a recommendation to that effect?

Emma Hardy: What is the phrase? You might say that but I could not possibly comment.

Q365 **Barry Gardiner:** That is good enough for me. I feel a Philip Dunne moment coming on, Chair, because the former Chair of this Committee spent so many years focused on SuDS and the final question that I want to turn to is about SuDS.



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I noticed in the Government's response to the Public Accounts Committee that it said, "DEFRA has published the review of skills gap and training requirements for the implementation of SuDS and schedule 3 to the Flood and Water Management Act (2010)". In fact, that skills review was completed in 2023. I also noticed from your recent Westminster Hall debate a subtle shift in tone. You said there you were considering whether to strengthen the current planning-led approach or to commence schedule 3 of the Flood and Water Management Act 2010, with a final decision expected soon. After 15 years of that schedule to that Act laying unimplemented, are you now telling us that it will not be implemented or will it?

Emma Hardy: The short answer is that you can either enact schedule 3 or you can achieve the same outcome in a different way. We are genuinely looking at whether the same outcome could be achieved for SuDS rather than enacting schedule 3. I have been a huge fan of SuDS for a long time, recognising how crucially important they are, especially given the constituency I represent. We have various examples of them around the constituency at the moment.

In June this year we introduced new national standards, making clear that SuDS should be designed to cope with changing climate conditions as well as delivering wider water benefits. There have been immediate changes as well to the national planning policy framework to support the increased delivery of SuDS and we will consult on national policy planning relating to this decision, including policies on flood risk and SuDS.

An interesting example is well worth the Committee having a look at. Severn Trent Water has been funding the SuDS Mansfield projects. There are examples of course of water companies being interested in this. Holding water in SuDs means it does not enter the combined sewer and does not create pollution incidents. Severn Trent has invested £76 million into the Mansfield area to look at how to store 30 million litres of water into SuDs to reduce flood risk for people in the area. That is a good example.

There are various other examples of cross-partnership working because there is a mutual interest in SuDS, not just because I like these systems as the Minister but also because water companies are increasingly interested in this. Stopping the water entering the combined sewer reduces the number of overflow incidents. An example in Hull is the Living With Water project and, as I say, Severn Trent is doing this example with Mansfield as well. There is a huge amount of interest.

Genuinely, a decision has not been made on whether we will enact schedule 3 or do the equivalent differently.

Q366 **Barry Gardiner:** There must be a reason this has not been implemented for 15 years. Why else does the Government delay something for 15 years that everybody is saying we need to do? You have championed it. The previous Chair of the Committee has championed it. We have all



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talked about the importance of it. Is this just money? Is this just saying, "If we do it that way, it will be too expensive and we need to cut this"?

Emma Hardy: No, this is genuinely about me looking at the best way to do this. You are right, this piece of legislation was written 15 years ago. It is right that we look at the best way to do this now. Are we looking at doing it with partnership projects? As I say, water companies are hugely interested in this because it helps them deal with some of their pollution incidents. There is a lot of interest when building new homes. Personally, where I live, I see lots of examples of SuDS up and down the constituency. It is genuinely about finding the best way to do this.

Q367 **Chris Hinchliff:** Minister, as you will know, the National Infrastructure Commission recommended a minimum of £1.5 billion per year to manage flood risk effectively. The Government have committed £7.9 billion over 10 years to flood resilience. Given the disparity in the figures, how confident are the Government that this level of funding is sufficient?

Emma Hardy: We are investing a record amount of money, the most money that has ever been invested by any Government into flood defences. We are investing £2.65 billion over the next two years. We have put money into maintenance, the most money, again, that has ever been put into maintenance. We are investing £4.2 billion over the next three years. That is even more than the amount that we are putting in in the next two years, 5% more. Then the £7.9 billion capital investment that you are referring to does not include the RDEL figure, which of course would be added to that and would be decided later. That is our capital investment.

I am incredibly proud, Chair, of the commitment that this Government—our Government—have shown for supporting flood defences. They are putting their money where their mouth is by putting record amounts of money into making our country more resilient to flooding.

Q368 **Chris Hinchliff:** Thank you, Minister. That is a pretty unequivocal answer. It is clear to see your confidence. Can I pick you up on some phrases you used there, though? I am interested to know how you respond to analysis by Flooded People UK that, in its view, average annual investment has been cut because the previous capital programme committed £5.6 billion over six years—£933 million a year on average. We have referred to £7.9 billion over 10 years, which is less annually. It also highlights that that figure includes costs for large-scale maintenance that were previously accounted for separately. Should my constituents feel misled by DEFRA's claims of record investment and the largest in history?

Emma Hardy: No.

Q369 **Chris Hinchliff:** Do you have any further response to that analysis from Flooded People UK?



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Emma Hardy: I have a huge amount of respect for Flooded People UK and the trauma that they faced as a flooded community. I am interested to talk to them about their experiences and how we can better support people recovering from flooding. However, do I stand by the figures we are using? Absolutely.

Q370 **Chris Hinchliff:** Moving on, of the £2.6 billion pledged for flood defences in 2026, £25 million was allocated specifically to natural flood management. Could you outline to the Committee what steps you might be planning to take to secure a better balance in the future between traditional capital defences and adaptive nature-based solutions?

Emma Hardy: The previous Government had a straightforward funding formula based on numbers of properties protected. The difficulty with that particular formula is it made it hard for natural flood management, because it was hard to evidence that you had moved from one risk band to another. If you put a wall up or you do an engineering solution, you can quite easily calculate, "This wall holds this much water and protects this many people." Slowing the flow or creating a floodplain or something like that does not have that same level of evidence.

The previous Government decided to make a £25 million pot available because they acknowledged that their formula was not delivering natural flood management. They created this ringfenced pot. We are consulting at the moment to do this differently and to change the way the formula operates to mean that you can look at doing natural flood management. One of the things we are consulting on is not having to evidence the changing risk band through a natural flood management project. Another thing we are looking at is fully funding the first £3 million for natural flood management, because many natural flood management projects are less expensive than others.

We are doing this because I am a huge fan of natural flood management. It is good for biodiversity and nature and creates beautiful spaces that people can enjoy. Engineered solutions have their place, clearly, but it is great that by changing the formula, rather than having the previous Government's separate little fund, we are mainstreaming it and putting it into the heart of our flood programme. When you are looking at the best solution for a community in an area and how to tackle flooding most effectively, you can immediately think about whether natural flood management is the most effective rather than having the previous Government's separate little pot of money that you had to apply to. We are mainstreaming this, if everyone agrees to the consultation that we have put out at the moment, of course.

Dr Catovsky: It sounds like quite a technical issue around whether you are moving from one risk band to another, but it makes a huge difference. It stacks the dice against natural flood management. By removing that requirement, in our view, we will see many more natural flood management schemes becoming part of the main programme



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rather than as a separate bespoke fund. Having the commitment to fund the first £3 million, as the Minister said, will also help. The consultation is open for a couple more weeks and so people can still respond. It is proposing a range of ways that we can remove some of the blockers to using natural flood management.

Q371 Chris Hinchliff: Without wanting to guess the outcome of the consultation, it sounds like you would expect that potentially to have a qualitatively different level of outcome for natural flood defences, significantly changing the number of them.

Dr Catovsky: Yes, definitely. Mr Duffy talked about the shape of the new programme. It will look and feel very different, not just in natural flood management, but in a shift towards more maintenance, away from just building new defences. We will also see a greater range of alternative solutions, including property level resilience. The whole shape of the new 10-year programme will look and feel different from the previous programme.

Q372 Chris Hinchliff: We have had submissions to this inquiry that competitive bidding processes may disadvantage smaller local authorities and community-led projects. What steps are the Government taking to ensure long-term, stable funding that maximises benefits for all areas?

Emma Hardy: The consultation—and, as I say, it is a consultation at the moment—is on looking to fully fund the first £3 million. Lots of smaller projects that are happening up and down the country, under the current system, have to find partnership funding. It is quite difficult to find partnership funding for smaller projects, especially when you cannot evidence this changing risk band.

From the £3 million and above, you will get 90% funded by grant by DEFRA and then only a 10% partnership funding gap. This is because all MPs have so many examples at the moment—I am looking at the Chair now—of huge partnership funding gaps for some of their projects. Councils in areas of deprivation simply do not have the money and cannot find the money from elsewhere to fill this gap. Those projects sit waiting and nothing happens with them year after year. We are looking at making it much more straightforward and looking at where you can find this 10% partnership funding gap for projects above £3 million. Then you can move then into the prioritisation phase of that.

The consultation is also looking at the question: if all these projects could go ahead, how will we prioritise which go ahead? That is when we start looking at: do you want to prioritise natural flood management? Do you want to prioritise areas of deprivation? Do you want to prioritise people who are frequently flooded? There are various criteria. The consultation is asking what you would like to prioritise for moving them forward.

We have done this because the bureaucratic system we have means it is incredibly different. Every single project seems to have a different



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partnership funding gap that it is trying to fill. As I say, many of them have been stuck for years unable to do that. This is much more simplifying the process. We want to do this because I believe passionately that we need to do more as a country to make ourselves more resilient to flooding. Simplifying the process about building flood defences and making it more straightforward means that we can move more through the system and, hopefully, better protect more people from the changing climate.

Q373 Chris Hinchliff: I have a final question, following up on evidence that we heard from Mr Duffy in the previous session. What plans does DEFRA have on funding the replacement of major assets, like the Thames Barrier, which will reach the end of their life this century? We have heard about the need for decisions on options by 2040.

Emma Hardy: We will consider those major projects separately to the rest of the flood budget and the rest of the projects that we are looking at. When you are looking at what is happening with what would need to be done with the Thames, you are talking billions. They need to be considered away from the rest of the budget that we are talking about for the rest of the country. We are working with the Environment Agency to look at Thames and where we have these big, expensive defence projects. Funding the Thames project from this flood budget would not leave anything for anything else. It will be considered separately.

Q374 Chris Hinchliff: Do you have anything to add on timelines or processes that DEFRA are currently looking at for that?

Emma Hardy: Not at this moment but, as soon as I have something more definite, of course I will inform the Committee.

Dr Catovsky: We were keen to give the Environment Agency a single budget that allowed it to prioritise the balance between maintenance and capital and also how much it funds things like these strategic studies. As the Minister said, these kinds of projects will be part of the overall funding envelope that the Environment Agency has, but it will have a degree of flexibility about when and how it brings these things forward. A lot of work is going on for Thames Estuary 2100 about the future of the Thames Barrier. That will be part of the overall package of funding. The Environment Agency will have more flexibility about how it can use it.

Q375 Chair: On the subject of the funding formula, clearly you have spoken about the overall money there will be and how you might utilise it differently. Wherever that money ends up being spent, which projects are least well served by the current formula and who are you trying to make more likely to receive these funds in future?

Emma Hardy: You can almost see that by what the previous Government did in creating these separate pockets of funding, because the formula was not working. We know that the formula was not working for natural flood management because they had to create a separate



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fund. We know it was not working for people who were frequently flooded because they had to create a separate fund for people who were frequently flooded. You can almost see that they were trying to put sticking plasters on the formula to make it work where it was not working.

If the consultation is accepted, I imagine—and I will be honest that I am keen to see—more natural flood management schemes will come through. The formula was originally based on numbers of properties protected. Highly dense urban areas scored well to have engineered solutions, because they can clearly evidence the changing risk band and it protects a load of properties. It was dismissively referred to by lots of people as the chimney pot formula, as in: count the number of houses and you are more likely to get it. We are looking and thinking about rural communities and smaller areas, people who face frequent flooding but, under the current formula, get nowhere near the money that they would need to support.

Of course, this all comes back to the prioritisation. That genuinely is open for consultation. What do we want to prioritise? I have put my cards on the table saying that I would be keen to see more natural flood management because it is good for nature as well. Which ones are prioritised and taken through depends on the weighting that you give different things. Would you give areas of deprivation a greater weighting? That is genuinely open for consultation.

Dr Catovsky: We are confident that the new programme will have a much bigger shift towards refurbishment, replacement and maintenance of existing assets. We can see under any scenario that the Environment Agency model is based on the change in the funding formula, because previously we essentially had two separate pots, a maintenance pot and a capital pot. Creating a single programme allows the Environment Agency to decide the best interventions in an area and we will naturally see a lot more of maintenance funding going on. More of the funding will go towards maintenance over and above new defences. Given the state of our assets, that feels like the right thing to be doing.

Emma Hardy: The NAO report recommended that the EA should have that budget and put maintenance where it needed to and put it in new defences. Upgrading is the other thing to mention. It is not just maintenance but upgrading some of them.

Q376 **Chair:** When people are listening to you talking about this—and we have heard you talk about the formula many times, in Parliament and outside—everyone considers if they do not have a flood scheme that the formula is not working because if the formula is working, their scheme will be there. However, given what you have said, there will be more nature-based solutions, more maintenance and more upgrading.

It sounds like major engineered programmes for large urban areas will happen less. I can think of one in Chester and North Derbyshire that



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never got anything on the previous formula, but it sounds like potentially that scheme could be even further away. I do not know. Is it about the numbers? Are we talking about areas like your own city, York, that had large numbers of people flooded and were previously likely to be near the top of the scheme? Who are the losers in this new formula?

Emma Hardy: That depends on what the consultation comes back with on prioritisation.

Q377 **Chair:** Do you have an idea of what you would like it to say and so who are likely to be the losers?

Emma Hardy: Anything that we do has to be value for money. Ultimately, flood protection is about lives and livelihoods. Of course, you have to look at the numbers of properties protected. I am saying that the numbers of properties protected cannot be the only measurement that we use. To be fair, lots of the big flood defences for cities already exist. Thinking about my own city, they need upgrading and maintaining but they are already there. However, lots of places around the country are smaller and have no defences whatsoever.

Genuinely, it is impossible for me to say at this moment which ones would do better and which ones would not because it depends on which ones are prioritised. However, we would want your scheme to at least get through to the prioritisation process rather than being stuck forever because it has this massive partnership funding gap.

Q378 **Chair:** I certainly appreciate that but, with respect, you seem to be good at identifying who is more likely to get funding, but you are a little more shy about who is less likely to get funding. If I could just push you on that, you have a clear idea of the type of schemes that are more likely to get to the top of the list now, and that is great. By definition, within the overall pot, you must have some schemes that are now less likely to get to the top, or are you saying that you think all the major schemes are done?

Emma Hardy: Whatever we decide to do with flood funding has to be about value for money. It cannot be down to my individual thoughts on what is right and wrong. This is why, honestly, the consultation matters so much. Yes, I would like to see more natural flood management. I am quite clear about that. Of course we need to be thinking of value for money. Of course, if large urban areas are in desperate need of flood defences, they need flood defences, but as you know yourself from your own experience, different areas require different solutions. At the moment, we have a situation where many areas are not doing anything because they cannot get over the partnership funding gap problem. We are trying to make it as simple as possible to get to prioritisation. The weighting that we give prioritisation is out for consultation.

Of course, we need to be thinking about value for money. Some of the natural flood management schemes are a lot cheaper than some of the



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big engineered solutions. Some of the work that we are talking about with property flood resilience is cheaper than a big engineered solution as well. We could be in a situation where we are able to do many more. Some of them are not as expensive because you are not looking at the big engineered answer that you might have been looking for and that the formula forced you to look for in the past. The whole plan that we are trying to do is protect more people from flooding. The aim is to protect more people from flooding.

Q379 Chair: Earlier you were talking about flood alerts and you said that sometimes people get flood alerts and do not know what to do. It has been made clear to me, and to other people who have met flood victims, that the problem is not too few alerts, but too many. They constantly get these alerts. They know exactly what they are meant to do: pick all the furniture up and march upstairs and clear downstairs. They probably do that the first couple of times these alerts come through, but they get these six or seven times in a couple of months and eventually they think, "This is the alert that cries wolf." They do not bother and then, when the major flood event happens, they find that they have lost all their stuff and they say, "I did not get the alert."

It seems to them that even when there is a relatively low risk, they still get alerts and they are not that useful. You need to receive an alert of a high likelihood of floods, but you can have too many. Have you heard this before and is there any push on the Environment Agency to say, "Let's be proportionate about this"? It causes a problem if you are giving people alerts all the time for their mental health and stress and for them eventually saying, "I am not moving my stuff again."

Emma Hardy: You are right, it is something that we have heard before. The taskforce was looking at this as one of the lessons learnt. We are looking at a common warnings framework and we have created an action group from the taskforce, which is the Environment Agency, the Met Office and some of us to look at this issue. When I talked to the Met Office about it, it explained to me that predicting the weather is never an exact science. The worry is always do you warn someone, as you have just said, do you send too many warnings so that someone thinks, "This is another warning that I can ignore, it never actually floods," or you do not send anything and someone ends up flooding? It is often, from that they were saying to me, a fine judgment call because it can be unpredictable. Where we had over Christmas huge amounts of rainfall in a concentrated area, which was difficult to predict, some of the flood warnings went to the wrong area because it was so difficult to predict with what was happening.

You are right that it is very hard and difficult to get the balance right. My advice is that if you get a flood warning, please act on it, because I would rather be safe than sorry, but I completely accept the impact that it has on people's mental health if they have been flooded and they are getting warnings all the time. We are looking at this now through one of the



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action groups about the best way to warn and inform people about what to do. We have a great system of flood alerts but of course it needs more work and it needs finetuning and it all comes down to how we can better predict where the rain will fall. Sometimes that is really difficult. However, I completely agree with the point that you are making.

Q380 Olivia Blake: I want to ask a bit more about the conversation that we had in the previous session about having a single national flood reporting system and whether you think that that would be beneficial. I am particularly concerned about local councils not having capacity to deal with increased call numbers, as well as what the EA was suggesting about its ability to flex up. Would a national flood reporting system have more flexibility than local authorities would be able to manage themselves?

Emma Hardy: Yes, it is difficult because when I have visited people when they have been flooded—and I sadly went to see quite a lot of people after the recent floods—it is the local council that deals with the aftermath of a flooding event, having to rehome people, get social services involved. They have the responsibilities in this. I remember vividly visiting an elderly lady, who was having to be rehomed by the council because her property had been flooded and she was living in a council property.

On the question of how local authorities can be better ready for people contacting them for flooding, that is why the lead local flood authorities and the local councils need to have an effective plan in place so that they actually know what to do. I cannot stress enough—I know that we have many new councils and councillors up and down the country—the important role that they play here, but we need to make sure that they have these plans in place and that they know what to do in the event of the flood. Surely that would include making sure that they have the people available to staff phone lines and there providing the support.

The Environment Agency can offer support and advice to lead local flood authorities, but if you are flooded and you are calling a national line, really you need the council to come and help you, so I am not sure whether it would solve the problem. Where I do agree is that there is a confusion in the general public about who to contact and when and I am trying to think through what the best answer to that is.

Q381 Olivia Blake: When a major incident happens, vulnerability is quite difficult to pinpoint and lots of different lists exist from different companies. Do you think that there is more that should be done to integrate a vulnerability list? It can be quite difficult, particularly for vulnerable people, to access the correct information, to be able to report and get the support that they need.

Emma Hardy: Yes, you are again totally right. One of the lessons learnt was how to protect the most vulnerable from a flooding event. There are lots of different definitions of vulnerable, and some people who are



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vulnerable in the event of a flooding might not be classified as vulnerable in other ways.

Q382 **Olivia Blake:** Generally in a major incident context, it is under-fives and elderly people, and people with disabilities.

Emma Hardy: Yes. The Cabinet Office led on this, because the taskforce is joint chaired with me and the Minister for Resilience from the Cabinet Office. It has led an initiative to map vulnerable groups and provide a clearer definition of what vulnerable means. It has created an incredible tool, which can be used not just for flooding, which it was showing in the taskforce. It is about exactly what you have said, so that local councils and emergency services understand who is where and who needs support.

The Cabinet Office has been leading on this piece of work. We are talking about flooding, but it is leading on it for whatever the situation might be. Do we as a country know where vulnerable people are and how to identify them? It illustrated it in the taskforce, which was really interesting, about how it is collecting that data and information, if it is flooding or if it is a power outage or whatever it might be, so that you know where the vulnerable people are. It has been leading on it and it is genuinely a good piece of work.

Q383 **Olivia Blake:** I am glad to hear that you are feeding into that work and that it is across government. Moving on to the support for local capacity, I know that flood wardens play a huge role and there are lots of voluntary groups. Small businesses can play a role but are usually quite hard-hit when flooding occurs. Is there more that can be done to strengthen that local capacity?

Emma Hardy: Yes. I met an amazing man called Peter who ran a flood action group. I was so impressed by him. One of our colleagues, Michelle, took me down to meet him. There is an amazing role that volunteers play, and he showed me what he does in a local flood action group to convene everyone and get everyone together. He is an ex-colonel, so he ran it like a military operation and everyone had their roles. He was incredibly impressive.

I have been talking to the flood forum to see what more we can do as DEFRA to support the flood forum and support some of the flood action groups around the country, because there are some brilliant examples of volunteers doing an incredible job. I do not have the answer yet, but I am thinking through how we can share that best practice around the country about what these volunteers do and how effectively they do that.

As I say, I am not sure what the answer is at the moment, but when I met Peter I was so impressed and I thought that everyone needs to hear how he does this, because this is the best example I have seen in the country of a flood action group going out there and doing some work. I am thinking about something around Flood Action Week, whether we can



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do a bit more to talk about how we can support some of these groups and volunteers around the country.

However, one of the things that I thought was pretty awful was when I have met other volunteers and they tell me about the abuse that some of them have faced when they are closing roads and asking people to go a different way. When you have volunteers working in the community and they are being abused for volunteering and doing a good job, that was pretty awful to hear. I have nothing but respect for them.

Q384 Chair: I will come back to Olivia in a moment, but on that, have you made any assessment about whether there is a class differential in these flood groups? We have tried in an area of Chesterfield to get a flood group together and found it very difficult. All of the examples that I have seen have tended to be in pretty middle class rural communities, with lots of people with plenty of time on their hands who love to get into that. Has any work been done on whether there is a difference in the ease of being able to successfully get these flood action groups together based on the kind of communities that we are talking about? Is there anything that we can learn or do in that regard?

Emma Hardy: It is definitely true to say that most of the people who I have seen involved tend to be retired people who have the time, and of course it is easier to think about the constituencies that we represent and the people there not having the time to be able to involve themselves in that. You are right on that, which is why I am trying to think through what the best way is that we can look at supporting these groups. Some of the groups around the country are supported by the parish, where there are parish councils, which I know there are not in cities. Where there are parish councils, the parish councils are obviously supporting some of these groups.

To me it is part of the wider conversation about community resilience and how we make the public more resilient to flooding, which comes down to what you do when you get a warning, how you act and what is the community reaction and how prepared is the local council, what is the role for volunteers. It is a big piece of looking at making our country more resilient to flooding. I do not have all the answers here and now but it is definitely something that I am talking about with Tracey from the flood forum, because she is involved in supporting a lot of these flood action groups, but what more can we do? You are right that it is very varied and it will depend on the person's time and availability and that is not the same up and down the country.

Chair: Not many people want flooding to become their hobby. Apologies for interrupting, Olivia.

Q385 Olivia Blake: We have heard serious doubts that the insurance market will be ready to return to fully risk-based pricing when Flood Re ends in 2039. What discussions have you had about the future of the scheme and the risk of an affordability gap re-emerging? I know that this is something



that you are passionate about.

Emma Hardy: Yes. Flood Re sits with the taskforce, and one of the action groups following what happened over winter with the flooding is looking at insurance and the availability and affordability of insurance. That is one of the action groups that will feed back to the taskforce. Flood Re has just recently had to put up the premiums, because it buys insurance on a global market every three years. We all see the global situation and the cost of insurance has increased, so the cost for customers, whether or not they are ceded to Flood Re, has increased for everybody. It is important that we look at making sure that insurance is available for everybody who needs it and is as affordable as possible, bearing in mind that they are purchasing insurance in a global market and they are facing additional costs.

Q386 **Olivia Blake:** What options have you explored for a successor scheme that addresses current exclusions, for example SMEs and post-2009 homes, and incorporates lessons learnt from the original scheme?

Emma Hardy: I have seriously looked at businesses, because I know that that is a point that gets raised. As you know, Flood Re works by everybody paying a bit more on their insurance to cover people who otherwise would not get insurance. If you were to involve businesses in this, you would be putting up premiums for businesses. It depends how you do it, whether as a separate scheme for businesses or by bringing them into the Flood Re scheme. Either way, if you were to offer Flood Re to businesses, you are looking at increasing the cost of insurance for everybody to cover the costs of those businesses. That would levy every single business around the country. At the moment I am not convinced that that is the right way to go with it. I see, having looked at it, that Flood Re is a scheme that is available for homeowners rather than for businesses. I am always happy to keep things under review, but that is my feeling at this moment.

Q387 **Olivia Blake:** What actions have been taken to scale up initiatives, such as the Build Back Better scheme, and how are the Government encouraging broader insurer participation?

Emma Hardy: I am a big fan of Build Back Better. In my first week as Minister, or my second week maybe, we had an insurance roundtable and brought together all of the insurance companies, where I said that we want every insurance company to offer Build Back Better, so it has increased. I think that 72% of the home insurance market offer Build Back Better and there are two more insurers, which is another 5%, committed to going live soon, so we will be getting up to 77%. Obviously I want 100% of insurers to offer Build Back Better. We are doing another insurance roundtable, which will be a year and a little bit on from when we did last one, to say what has happened in the last year.

Secondly, it is to make sure that when people phone up with a claim they are informed by their insurance company that Build Back Better is better,



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because they are not. Even when some companies offer it, when you ring up to do your claim, that conversation is not had. It is often not explained to the customer what Build Back Better is, how it can be used. Therefore, there is that communication point that needs improving for the customer, because it can make such a difference. This is up to £10,000 that they can use on their home to make it more resilient to flooding. Anything that we can do to try to make it simpler, make it easier and encourage more insurance companies to do it, encourage insurance companies to talk to their customers about whether or not they have it available is crucially important.

As Phil said, property flood resilience, if you are 2 feet underwater, will not make a difference. However, when I go around and visit flooded people and I see that it has just gone over the lip of the door or it has just gone into the air bricks or somewhere like that, that is where you could make a difference with property flood resilience. That is where you could prevent some of those people from being flooded if you had some additional measures.

I do not know if Flood Mary has given evidence to your Committee, but we love Flood Mary. She talks about the kitchens that she encourages people to put in and raising up the cupboards. Things like that make it so much easier for recovery from a flood event. That is where this Build Back Better money is so important so that customers can have it. My message to the insurance companies is that they need to make it as simple and easy as possible for their customers to do this.

Q388 Olivia Blake: Is the Department getting a cumulative cost of what is being spent on Build Back Better by the insurers? Yes, 72% offer it, but how much is take-up available? I am happy for you to write to us if you have those figures but not to hand.

Dr Catovsky: We know how many claims there have been. It is just over 1,800 claims that have included Build Back Better. There is more that we could do get better, clearer, more up-to-date information on where it has got to. It is part of a broader piece for us. Phil Duffy also mentioned the work that the Environment Agency is doing with Peter Bonfield, which is looking more broadly at the different levers and ways that we can encourage the uptake of property-level measures. Our feeling is that the Build Back Better is absolutely critical to that, but there will be other things and we will be interested in his report. He will present at the next flood taskforce so that we can consider some of his recommendations as well. It is an important part of the landscape. We started this session thinking about climate change, but one of the ways for us to become more resilient will not just be hard defences or even natural defences, it will also be things like property-level interventions.

Olivia Blake: Thank you. It would be interesting to understand the scale of uptake, if you can provide more numbers.



Emma Hardy: It is not enough, I can say that. When you look at the numbers of properties flooded in the last year and the numbers of properties that have used Build Back Better, it is nowhere near enough. I am really keen to drive that forward, which is why we are doing another insurance roundtable. From talking to people on the ground who have been flooded—and that is why the review that is being doing into property flood resilience is so important—one of the barriers to property flood resilience is that people say, “I am going to be out of my house another two or three weeks. I just want to get back to my home. I don’t want to be living in a B&B.” It is the time.

The other thing is the skills. Do you have the professionals, the traders with the skills needed to put PFR into a property, because they are not always there? Do the builders and the people in the area know and understand about PFR when they come to do an assessment of your property and what is needed? One thing that sounds small but is important is that three or four weeks ago a trade association was created for property flood resilience. By having builders and people who can now be members of a trade association, it is about upskilling. They are talking to the trades involved in this to make sure—because if your builder on the ground does not have the knowledge or skills to fit PFR, they will not be able to recommend it to you. It is not just about insurance companies informing. It is about having the people with the skills and knowing what their products are.

My vision with PFR is that it is a completely mainstream thing, as mainstream as getting loft insulation, that you can pop to your DIY store and you can look at some property flood resilience measures and you can buy them and you can pop them on to your home. I want to make that it that mainstream. In the Flood Action Week that is coming up in October, I want to push this forward so that people have much more knowledge about the products on the market, who can fit them, what do they do. Importantly, what I want to see happen is that insurance companies recognise that people are doing this to their properties and drop their premiums. That is the plan.

Q389 **Olivia Blake:** Thank you very much for that answer. A final question. What role does the Government see for broader lenders and other financial actors in supporting household and business adaptation?

Emma Hardy: They are really keen. As you can understand, the people involved in offering mortgages want to see that homes are resilient to flooding. It is important for them as well. We have the insurance companies on board, through the ABI and Flood Re, sitting on the taskforce. It is doing some work looking at this as well. The review into PFR is also talking to mortgage lenders about property flood resilience. That will be good and important and they will present it to the September taskforce and we will share a copy with the Committee.

Q390 **Chair:** Thank you very much. You referred to the Flood Resilience Taskforce, which was announced in September of last year. How often



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has it met and do you think that there are any concrete achievements come out of that yet?

Emma Hardy: Yes, the taskforce is the big strategic bringing together of everybody involved in looking at flooding. It has met three times. The first meeting was about how prepared we were going into winter. It brought together everybody to address the question about are we ready, talking to the councils, the different agencies, emergency services, the Environment Agency and so on. The one after that—there is a lot of work that goes on between the two different meetings—was collecting all that information about the floods to do lessons learnt, to circulate that, bringing everyone together to ask what lessons we have learnt from the flooding that just happened. One of them was that warning and informing was a problem, predicting where it will fall, having issues with insurance. All of these things came up as common themes.

Then we created some action groups to work on some of these different problems that we have identified, to present back to the taskforce to say that these are the problems identified, this is what some of the solutions are. From the taskforce we came up with—the Environment Agency has been doing a piece of work on the property flood resilience, because that seemed to be an issue. As mentioned, the Cabinet Office has been developing a tool because it came up as a problem of where the vulnerable people are and do we know how to help them.

Another thing was on the money that is given out to councils. The MHCLG came and did a presentation, because that came out as a problem—how to make it simpler and more straightforward for people to get the money that way. In September we will be again looking at Flood Action Week on how prepared we are, “These are the lessons that we have learnt, these are the actions that we have taken. How prepared are we going into this year?” Therefore, you are constantly creating that cycle of learning and improving and learning and improving, with all of the different agencies around.

Separate to that we have done offshoots. We did an action flood management event as well. The taskforce is like a big convening centre of everybody who has a role to play in improving our country’s resilience to flooding. From there, different actions happen and then come back and feed back together. The strength of it comes from all of the people around the table and the fact that we have the Cabinet Office and MHCLG sitting on there. Is there one in September? We have the Minister at the Department for Transport coming to one of the next ones, because obviously flooding impacts transport.

Dr Catovsky: One of the things that we are keen to do at the next taskforce, which will be one year on, is to ask if we are materially better prepared this winter than we were last winter, what specific actions have we taken. It very much has that focus of learning lessons and using that to drive improvements.



Emma Hardy: We do not want to be having the same conversation about the same problems. Some of the problems about warning and informing will not be solved in a matter of months. It will constantly need to be developed and refined and improved. We need that cycle of continuous improvement. If we are going to build our country's resilience to flooding, we need that cycle of continuous improvement by looking each time. There is no judgment on the taskforce. It is just very straightforward of what worked, what did not work, how can we do this better, and then repeating that over and over again.

Q391 **Chair:** The critics have said that it is not meeting that often. Can you point to things that are materially better as a result of this taskforce?

Emma Hardy: Yes. As I say, because you are convening such a large number of people and it is looking at it as a whole, I think that the number of times that it has met is right to bring together that many people. There is the action group on warning and informing, the action group looking at insurance and problems on insurance and how we can improve insurance. There is the flood consultation, because one of the things that came out was different flood projects and the fact that so many are stuck and how we can improve the flood funding formula. That is something else that we have looked at. There is the work that we have done on natural flood management. We have the fire service, which was one of the things that colleagues had asked me to include on there, because of its role that we need to be looking at as well.

There is a whole list that I have somewhere of all of the lessons learnt and actions taken. These are some of the lessons learnt that we had. One of them was forecasting, occasions when timelines and accuracy of weather forecasting and flood alerts were challenged and the range of weather and flood-related warnings from different organisations could be confusing for the public. The Met Office and the Flood Forecasting Centre are looking at post-event analysis, updating their modelling. The rapid flood guidance capacity is live again this summer. The warning and informing and use of emergency alerts: we have done the common warnings framework and the EA is looking at how it can improve its warning service and emergency alerts as well. Local response arrangements came out as an issue, arrangements for flood emergency response for people on the ground.

One of the pieces of work that the EA is doing is reviewing all the multi-agency flood plans that the local resilience forums have. It is taking all of those flood plans in and analysing them to see if they are good enough, to be blunt, and then it will present back to the taskforce and talk and work with those local resilience forums. Again it is, "How prepared are we, are those plans ready and effective for this winter?" Looking at the resilience hub pilots again, which was the question about how we deal with the confusion on the ground, we have done some pilots on that. There is the MP emergency pack, and building up for Flood Action Week.



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Protecting the most vulnerable was the other thing that the taskforce heard about. We have said that the Cabinet Office is doing the initiative to map where the vulnerable groups are and provide a clearer definition of vulnerable. There is what we can do on national response arrangements, looking at operational lessons embedded and tested and a recent exercise of the national flood response.

These are all the things that we said, from having the taskforce, that honest appraisal of what worked and what did not. These are all the things where we need to do some work. That is the work that we have done. I am not saying that we have solved it all because it will always be a work in progress. As Sebastian said, what we are looking at, the question for me, the exam question that I hold myself to, is: are we better prepared this year than we were last year because of the work that we have been doing?

Chair: Thank you very much indeed for your evidence that you have given us today. We will bring this session to a close.