

## National Flood Forum Annual Conference 25 February 2010

Lord Chris Smith

### Introduction

It's a pleasure to be speaking here at your national conference today. You are unique in being the only organisation that exists solely to provide a strong voice for those people at risk from flooding and to give advice and support to those communities at risk. I welcome the publication of your 'Manifesto for flood victims' that highlights many shared priorities that I will talk about today. The National Flood Forum plays a key part in raising awareness of flooding and all the costs, heartache and health risks that flooding can bring. Many of your members have been flooded and as a result are passionate about, and very effective in, what you do.

Our staff are also passionate about their role, be it at ground level maintaining and servicing our pumps, sluices and dykes, or through the deploying of the capital investment that can provide much needed relief through new defences. Since 2007 we have completed **116 more flood defence** schemes in England and Wales protecting an additional 77,500 properties. This means we are better protected from flooding than ever before.

The Environment Agency strives to be visible, as we deal with a flood, but behind the frontline there are also many staff who strive to ensure that we have the best flood maps in Europe, that we use the most accurate and up to date science and technology, and that we provide 'floodline', our help line and free flood warning service envied by many. Only last week our Dutch counterparts (who know a thing or two about flood risk!) came to ask us about our mapping and warning programmes which they look to copy.

At present there are over **2.6 million properties in England and Wales** at risk from flooding from rivers and the sea, and over 3.9 million properties at risk from flooding from surface water, including over one million at risk from both. That's **1 in 6 properties** at some risk of flooding. The risk of flooding is not evenly spread across the country. There are some hot spots but, as our data analysis gets even better, our ability to predict where the problems will be at their worst increases.

Even in its current state, our data analysis is as good as any across the world. For the flood risk that comes from our rivers, we know quite accurately which are the

areas at greatest risk; but the people likely to be affected need to know this as well, and that is a big challenge. For surface water flooding, our understanding is growing, but we are working closely with local authorities to improve the quality of information we have in order to help predict where, during stormy conditions and tempest, the surface water will accumulate and where the flood risk will need to be managed or warned about.

Our mapping work also highlights how many of the critical services that keep the country running are at risk of flooding. In England ten percent of major roads are at some risk. Twenty per cent of our railways. Thirteen per cent of our police fire and ambulance stations. Nine per cent of surgeries and health centres. I find these statistics truly concerning. The problems of managing the impact of a flood on people and the streets where they live is in itself a Herculean task, but when you add to the grief and difficulty, the loss of water, electricity, gas, and phone networks and the disruption to those very systems that we need to depend on in times of flood, the complexity and risk increases dramatically.

We are now putting a huge effort into helping local authorities and the key infrastructure operators understand and deal with the risk to this basic infrastructure and the domestic life support system. We help each other by protecting, moving or preparing to recover from flooding at these facilities. In Cumbria for example the work we did before the flood with others paid off. The Fire Officer in Keswick commented that many lives were saved due to the new multi-agency flood plan that had been put in place and the way it was used during the flood.

### **Cumbria**

As you are of course well aware, Cumbria saw some devastating flooding just before Christmas – the impact of the flood was clear to see – PC Bill Barker tragically lost his life when a bridge collapsed, 1,800 properties flooded, 200 homes were evacuated in Cockermouth alone and six bridges were washed away. Closure of these bridges caused obvious disruption to lives as well as essential services, as well as risk to the telecommunications and waste water infrastructure. The water in some people's homes in Cockermouth was eight feet deep.

The Flood Forecasting Centre, which we jointly operate with the Met Office, warned that extensive property flooding was a possibility, several days before the flood. This prompted the emergency services to prepare themselves to respond, and ourselves

to work around the clock checking our defences and clearing watercourses. It also enabled the contractors for our new flood defences at Carlisle to work through the night putting temporary embankments in place to fill the gaps in the not-yet-complete defences, which as a result protected the whole of Carlisle from flooding.

We issued over 120 flood warnings, including seven severe flood warnings to approximately 1,800 properties. These helped to protect lives and property.

### **Community spirit**

Most remarkably of all, when I visited myself on the morning after the flood, I heard at first hand how the affected communities really pulled together to make sure they did what they could for each other. One person said: *“There's people in soup kitchens and people offering their properties everywhere. Once somebody's got their own cleaned up they're moving on to giving someone else a hand. It's just brilliant. I wasn't here during the war, but it must be similar to the war effort.”*

But however stoic people were, their suffering is still far from over now. I went back to Cockermouth just three weeks ago, and there are many people still out of their homes or shops, still negotiating with the insurers, still trying to get building work done, still wondering when the town will be able to get back to normal life. It's a stark reminder of the serious impact flooding can have.

Just as the people of a community such as Cockermouth have to work together to help each other through traumatic times, those organisations who work to reduce the risk of flooding and to manage its effects must also be coordinated and cooperate to provide the best possible service to people, and their homes and businesses. Which is of course exactly the message that Sir Michael Pitt gave in his report on the 2007 floods and which we are all now acting upon.

### **The importance of communities**

It may sound a bit glib but the best way to recover from flooding is to prepare for it: at both a property and business level, and as a community. Learning the lessons from the Carlisle floods of 2005, we – together with others – had undertaken an extensive programme of work with local communities in Cumbria. This work meant that people in towns like Keswick, Kendal and Appleby understood the risk they faced and understood how to prepare for flooding. This allowed them to secure their properties and evacuate in a planned and orderly way, when the flood came. We

were out with the local fire service, in Cockermouth, only weeks before the flood, knocking on doors along the High Street talking to people about their flood risk and what they could do to protect themselves.

This preparation provided better community involvement in flood warning and planning and was the key to getting information and help to as many people as possible, on the ground, at the time of the flood. It is the success of this approach which we now have to build upon as we seek to help people plan and manage for flooding.

In my eighteen months as Chairman we have begun to move the Environment Agency to one that communicates and interacts better with those we seek to help. Remote telephone calls identified by sophisticated mapping and forecasting of flood levels and translated into hundreds of automatic messages are fine and necessary, but the reaction to such a call is so variable. Some just ignore our warnings whilst others might panic and in spite of the information that's around expose themselves to greater risk. Whereas a knock on the door from someone who is local that you trust and has talked to you before about flood risk, is more likely to get the right response. This is exactly what we saw in Cumbria where local people briefed by the Environment Agency were able to be a lynchpin for the community response.

Through a new initiative, the Environment Agency is now employing community engagement officers in several pilot areas whose role it is to promote such local activity, understanding and action when the time comes. It is through this new more visible approach that we hope to improve significantly people's ability to plan and respond when the dreaded phone call or text comes.

As a result of this new initiative more people in these pilot areas are more aware of their risk from flooding than ever before, up by twenty per cent in August 2009, to now thirty one per cent.

Of course even the best warnings in the world will not stop a flood. People will still be made temporarily homeless, treasured possessions will be lost and people may still, tragically, lose their lives. It is at this point that the efforts of the emergency services, local authorities and the Environment Agency, with the strong support of organisations such as the National Flood Forum and the Red Cross have to be at their most energetic and professional.

We would like every community at risk to have access to local information and expertise long before a flood happens. Fore-warned is fore-armed and there is significant comfort in knowing that help and information are only a few streets or a phone call away. Whilst our Community Engagement project is in its infancy we feel that this new approach will have a significant impact in the future, in gaining public understanding and perhaps leading to the replication of the Cumbrian spirit in all areas at flood risk.

I would like to see each community have a similar scheme to that of the 'neighbourhood watch scheme' – a 'neighbourhood flood watch scheme' – where flood wardens can be identified, each community can develop its own flood plan, and arrangements can be prepared so that the more vulnerable members of society are supported and helped during the floods themselves.

### **What we have learnt and delivered**

Since the summer of 2007 we have accelerated the pace of many of our initiatives. The public and political support for more work to protect people from flooding that those floods brought allowed us to move forward on more fronts that we had planned. We have picked up this challenge and I am pleased to say we have a lot to show for our hard work since then.

There are many of these initiatives, and I would like to highlight a few here today. First, one of the best ways of preparing is to practise; and **Exercise Watermark**, currently in the planning phase, will help us (together with others) do precisely that. The crucial difference between this national flood exercise and previous ones is that communities will have an opportunity to be involved right across the country. The National Flood Forum is helping us in the preparation phase so that we can make it as real as possible for those who have not experienced flooding themselves to learn from those who have been devastated and had to recover the hard way. March 2011 is the target date.

Second, we have listened to feedback from people about what action they take when receiving our warnings and whether these are clear or not. Using this feedback we are trying to word and deploy our **warnings** to make them more effective. The views of the National Flood Forum community groups have been most helpful in this review.

Third, we have made significant progress in registering more people to our free flood warning service. Since 2007 numbers registered have increased from 310,000 to 450,000. And **within the next couple of weeks we will start the process of adding a further 500,000 homes and businesses, increasing the number registered to our free flood warning service to nearly one million properties.**

This is a major step forward. As recommended by Sir Michael Pitt, we are moving to a system where people who have land lines are automatically registered to receive the warnings and they can choose to **opt out**. This allows us to be able to warn many more people as drop out rate is only about one to two per cent. A few extra hours' warning makes all the difference to lives and livelihoods.

Fourth, we are trialling changes to '**floodline**', our telephone advice service, in some areas of the England and Wales, enabling the most frequently asked questions on local flooding to be answered by our call centre directly. If the query is more complicated we are able to pass calls directly to the relevant Local Authority, who will have people ready to answers their calls. This service will be open to all local authorities later in the year and moves us closer to a single point of contact for those at risk of flooding.

Fifth, whilst many of you rely on our advice you may also want to have direct access to information we use during floods. For some of you a quick glance from the window will tell you what the river and sea is doing. But from next month we will try to make it easier for those of you who don't have a window on the forces of nature by putting real time information on river and sea levels at 1,500 sites in England and Wales on our website. You will be able to tap in directly to our telemetry information.

And sixth, many people ask about the availability of flood products so they can improve the protection of their own properties from flood. Earlier this month we launched a **test centre at Wallingford** to allow flood products, both those appropriate for an individual house and those with a larger use, to be tested against a new industry standard and then receive the BSI Kitemark. This provides confidence for people, businesses and Local Authorities in the products they buy. There are many products on the market and the National Flood Forum's **blue pages** on your website helps people find the companies who supply these products.

I would like to see industry develop new, innovative products that can be installed in homes and businesses to reduce the risk of flooding. Climate change is likely to increase the frequency and severity of flooding, and the UK could be the global market leader on technologies to counter the impacts that it brings.

**Appleby** in Cumbria showed the world that these products can work really well. 46 homes and businesses fitted flood protection barriers when they received our flood warning. The products had been financed by Defra through a pilot scheme, at a cost of around £2,000 or £3,000 per property; and whilst water was cascading through the main street of the town, these 46 properties remained dry.

What I would like to see now is for these products to be readily available to members of the public and builders, so those at risk have easy access to them. However this must be done in the correct way – there's no point in protecting your property if, when the flood comes, the water pours in from next door! And this brings us back to the importance of working together to make a community resilient to flooding. If builders' merchants or DIY stores readily stocked these products, and actively promoted them with the right advice, this would help establish them as standard fittings for properties at risk of flooding.

We can also encourage people to make improvements so that even if the flood water enters their home or business it causes less damage, so that drying out and cleaning up is faster and easier – meaning moving back in is quicker. Such things as fitting water resistant skirting boards, laying tiles on the floor rather than rugs or carpets, and in the kitchen using water resistant materials such as stainless steel. DIY and building merchants could also help here by providing advice or by stocking advice leaflets, so people can make the best long-term choices.

The ABI have produced a leaflet to help after a flood providing advice on ensuring homes and businesses return to a more resilient and resistant state and encouraging discussions with the insurer or loss adjuster up front when agreeing a schedule of repairs. And I'll keep on arguing that the insurance industry could help further by reducing premiums and excesses where people have taken steps to protect their property, to make it more resilient, and to sign up to our free flood warning service.

The Environment Agency can do more to help communities in allowing all options to be explored and ensuring that the whole community is listened to. I would like to see

us get better at doing this. We know that it is not going to be possible to come up with nationally funded solutions for all places – the economics will just not stack up to justify this – but looking at the issues more locally at a community level, other solutions can be found. We must find more flexible ways of providing and funding defences. We mustn't make the best the enemy of the good. We must seek other sources of funding, such as developers or local levies or community self-help. We can look at how small groups of properties can be defended, perhaps using new and innovative products. And we must tap into local knowledge and ideas.

### **Investment for the future**

In these difficult economic times we have to make every pound count. Earlier this month my Board signed off the final spending allocations for next financial year for 2010/11 of a total spend of **£745 million**: an increase of £50 million. We will spend this together with Local Authorities and Internal Drainage Boards, in constructing new flood defence schemes and maintaining others, and also in improving our flood forecasting, warning, modelling and mapping and in raising awareness of flooding. For the first time we have provided an indicative allocation for the next five years as well, to allow more stability and security to the programme than before. It's an efficient investment, as every £1 spent provides £8 worth of benefit.

This money includes **£175 million** to maintain the existing flood protection assets which protect 2.4 million properties. It includes also the **£10 million** a year we spend on watercourse maintenance for dredging, weed cutting and channel clearance. Lists of where we will carry out this work, as well as the new schemes we are building are published on our website. The planned projects that we will now begin or complete will be in Nottingham, Dymchurch, Wigan, Kinmel Bay, Leeds and Morpeth.

Last year we published our **long term investment strategy** highlighting the scale of the investment required to protect England from flooding, and to present the choices available to Governments in the future. A similar evaluation is under way for Wales. Our modelling suggests we need an increase in investment in building, improving and maintaining defences – from current levels up to more than £1 billion a year by 2035 – to ensure that present levels of protection are sustained and improved in the face of climate change. It will of course be up to Government to make decisions about the level of investment the country can and should afford, but for the first time ever we have been able to map out the scale of the task and the consequences of the choices that are made.

## **Remembering 1947 – floods are not new**

Let us remember that flooding is not of course a new problem. In 1947 there was a widespread snow thaw followed by persistent heavy rain leading to large-scale flooding. I was surprised, when looking back, at the impact of this flood. More than 100,000 properties were flooded, 40 counties were affected and East Anglia's fens were a sandbagged inland sea. Reports say that the big rivers rose by a foot an hour. Evacuation was haphazard and usually unwanted by people, who moved to upstairs living, staying in their homes.

But the war was still fresh in people's minds. And in Upton upon Severn and Shrewsbury bakers earned a name for their bowling expertise by the accuracy of lobbing loaves from skiffs into upstairs windows. Even the post arrived more or less as normal but as a precaution letters were stamped with 'delayed by floods' in case of trouble later on.

Maybe we should learn a lesson from our more elderly relatives and learn more from our history of resilience in face of threat. Community cohesion is vital.

We know that we are going to face even greater challenges in the future, as climate change almost certainly brings increasingly erratic and extreme weather patterns. Despite the media flurries over emails at the University of East Anglia and IPCC mistakes about Himalayan glaciers, the scientific evidence is overwhelmingly agreed and compelling: that climate change is happening, is largely caused by human activity, and is likely to accelerate. We don't know the precise pace and scale of its impact, but we know the trend. And it means we are going to have to be prepared for more flooding in future.

We in the Environment Agency will need to continue to develop our expertise in flood mapping, warning and management. We will need to continue to build and maintain flood defences. We will need to work ever more closely with local authorities and other emergency services in providing coordinated preparation and response. We will need to find new and flexible ways of providing protection. And increasingly we will need to rely on that community cohesion – so brilliantly demonstrated in Cumbria – which will ultimately be the most important response of all.