Editor’s Note: This winter’s flooding has affected thousands of households, disrupted businesses, destroyed infrastructure and devastated people’s lives. The cost of the floods is currently estimated at more than £5 billion.

It is therefore unsurprising that a number of reviews, inquiries and commissions have been set up at both national and local level in an attempt to assess the collective response to the floods and examine what needs to happen to ensure the country is better prepared to manage flooding in the future.

We bring you this Bulletin Special in response to the reviews that are now underway. This is an opportunity to submit your evidence, voice your views, have your say, and (we hope) be counted.

We have included some submissions from our supporters about what they believe the reviews should address and consider.

For too long we have heard officials pass off more than a decade’s worth of flooding as unprecedented, unexpected or as a result of a freak weather occurrence. But it’s not. It’s happening repeatedly, it’s time for action and change.

At the National Flood Forum we have always been, and remain, committed to ensuring people on the ground, at grassroots, are enabled and empowered to lead and manage their response to flood risk in partnership with the authorities – that is what our Flood Action Groups are all about.

Now is the time to amplify our collective voice and make sure local experience and expertise is heard in Westminster and in local town halls.

For our part, the National Flood Forum will be submitting evidence to the National Flood Resilience Review, led by Oliver Letwin and also to the Environment, Food and Rural Affairs Committee Inquiry into Future Flood Prevention.

We will focus on key themes to address the fact that:

1. Flooding is traumatic, has a huge social and economic impact and is projected to get significantly worse. We need to raise our level of ambition significantly if we are to better protect our society.
2. We should act now if we are to be successful. Flooding is a really good example of where long term coordinated action is required. Short term expediency leads to the need for costly solutions.
3. Flood Re is being introduced because of market failure. The free market cannot cope with the scale of the impact of flooding, whilst providing affordable flood risk insurance to everybody. It gives us a window of opportunity to act. We should use it.
4. A response is required from across government, as well as partners in society.

In addition, our Chief Exec, Paul Cobbing, has been appointed Independent Chair of the Calderdale Floods Commission and is currently in the process of meeting communities in Calderdale to elicit their views to inform his draft report which will be published by the end of April.

We are actively doing what we can to make sure community expertise, local knowledge of the environment and firsthand experience of flooding is heard at the highest level. We would encourage you to submit your evidence to the reviews asap. If you can also send us copies of your submissions we can use them to inform our work, raise further awareness and add weight to the arguments we’re making on behalf of flooded communities across the country.

The deadlines for submissions to each review are slightly different but all are in March. Further details of the reviews and weblinks can be found at the end of the bulletin.
What’s in your flood review?

By Phiala Mehring, member of Loddon Valley Residents Association

I suspect that like most of you reading this article, I was hoping that this ‘bout’ of flood reviews would review, well, everything floods related. With the objective being to develop an effective and a fully integrated approach to flood risk management. But, if the various terms of reference for the reviews are anything to go by, I fear that we are looking at a more piecemeal approach with the various reviews running in parallel rather than together and that this opportunity for an effective response to flooding will pass us by. I did have to smile at a quip on Twitter suggesting that perhaps these reviews could be short: ask Sir Michael Pitt for the contents of his C drive.

But what does an ‘integrated approach to flood risk management’ look like? It is an approach that manages flood risk from the top to the bottom of the catchment. One that doesn’t predicate flood risk management on flood defences and dredging alone. It starts by aiming to slow the speed that rain water enters our rivers and streams and finishes with ensuring that flood defences are fit for purpose and that properties are as resilient and resistant as possible.

‘Slowing the flow’ and ‘holding back the water’ are key objectives for Natural Flood Risk Management (NFRM). Putting back vegetation in the upper catchments which impede the movement of water, reducing the compaction of soils so that rain can seep in rather than rush across the surface into local water courses and using woody debris to create natural dams which then ‘trap’ water behind them are all examples of NFRM. The objective is that they greatly slow down the ‘rain fall to river’ times. The result is that peak heights and flows are attenuated. Obviously the rain will eventually make its way to our main rivers, but not all at once. There is an additional boon to NFRM, in that if planned at the catchment level you can de-synchronise peak heights and flows, that is, have different tributaries to your local main river ‘tip’ their rain water into the river at different times. All of the above then gives hard engineering flood defences a fighting chance of not being over topped. NFRM must be a part of the various flood reviews.

Planning also plays a key role in flood risk management. Building in and around flood plains is BONKERS. Not only does this remove flood storage, alter the subterranean movement of water but it increases the number of homes and businesses in the direct path of the flood waters.

Quite frankly it is NOT progress to replace one problem: the lack of houses, with another greater problem, homes that flood. I know that a review should come to its own conclusions, but this one is a no brainer: **stop building in and around flood plains.**

Reviewing planning must also include; that all elements of flood risk management, including Sustainable Drainage Systems are fully addressed at the outline planning stage; ensuring that local planning authorities have the internal expertise and funding to challenge planning applications; that developers cannot walk away from a development which subsequently floods or increases flood risk elsewhere and that funding for the maintenance and upgrading of Sustainable Drainage Systems is for the lifetime of the development. All of the above is aimed at reducing the effects of surface water flooding. Do remember that surface water forms a substantial part of flooding.

Flood modelling and flood defences – I am not a statistician, and whilst I appreciate that you can have a 1 in 100 event twice in as many years, what we have witnessed recently is beyond a fluke (and I am very concerned that it is way more than ‘unprecedented!’). Flood modelling needs to be, and thank fully is, being reviewed. Hand in hand with this is the premise for designing flood defences. This has to change from ‘what are the minimum installation specifications’ to ‘what is the maximum protection we can offer’. The latter is very important when you consider the impact of climate change.
What’s in your flood review? (Continued...)

Resilience and resistance are vital parts of flood risk management. Ensuring that essential infrastructure and services don’t go under water is important and forms part of the reviews. But household level resistance and resilience is very important too. Perhaps embedding resistance and resilience into building regulations could be a start?

I know there are many, many excellent companies out there providing top notch resistance and resilience services and products (often going beyond the call of duty) but we are also seeing warnings about cowboys. Just what someone needs when they are at their lowest point. Do we need the reviews to include a national resistance/resilience review of the regulation of the industry? I can think of a few companies that would be up for working towards that!

Recovery MUST be included in any floods review. Once the waters recede, that is when the hard work and heart break cranks up a few gears. From reading previous National Flood Forum bulletins you get a palpable sensation that there isn’t enough funding for recovery. We can never completely stop flooding, so recovery is as important as ‘slowing the flow’ (but it doesn’t seem to carry the same political capital that a shiny new piece of hard engineering does). And recovery focuses on the most important aspect of managing flood risk; the people.

If the flood reviews are going to result in an effective approach to managing flood risk, they must take an integrated approach; reviewing all things floppy. And by the way, are these reviews working together or in parallel? How are the findings from each review going to be integrated into the findings of the other reviews? How are these reviews going to yield a successful outcome?

Hoping for Change

By Lynne Jones, Chair Keswick Flood Action Group

Well here we are, 10+ years of campaigning and a £6.1 million river defence scheme completed in 2012 to provide 1:75 protection (plus a bit) and then along came “Desmond”. A record breaking 341mm of rain fell in 24 hours, and 405mm in 48 hours – another record. Aside from that fairly impressive flood we’ve had a pretty miserable winter with more than a few near misses.

We now have a new Cumbrian Floods Partnership and a suggestion that things will be “community led” in the future, that flood reduction will be a priority (at last!). It is eminently sensible to look at a whole catchment approach, to examine the landscape to see where ponds, meanders and so on can store or slow water. I admit to being a little impatient over the benefits of tree planting, unless somebody buys some pretty big trees it will be little help in what is left of my lifetime.

However, this natural flood management has limits and needs to be part of large scale schemes which require money – replacing bridges with single spans etc. As a member of a Flood Action Group I believe there are things which are universal truths and these need to be recognised.

Call it dredging or gravel extraction, I care not which, just let’s not hear reasons why this can’t be done. Our river systems thrived for many years before the Environment Agency (EA) came into being and invertebrate colonies held more sway over actions than plain logic.
Farmers passed the knowledge of the land and its watercourses from father to son and that knowledge is still available to be tapped.

Let’s stop pretending gravel from Sites of Special Scientific Interest (SSSI) are contaminated waste when it seems convenient to label them so. Farmers used to be able to reuse the rock from the river beds to repair walls and pave gateways. Can we have some common sense here please?

For us reservoir management is a key to our safety. We need legislation for water companies to manage reservoirs to help with flood prevention. This one-sided view of climate change, that there may be droughts, is hardly our experience in Cumbria.

Let’s also get away from this idea that managing rivers for flood prevention will be to the detriment of the wildlife and the habitats of so many species. We’ve seen what damaging flows can do to a SSSI. Our needs are not mutually exclusive, in fact we had more fish in our rivers when they were managed by local people who understood the watercourse by living by it, rather than through a computer model.

We don’t want to wait for years for decisions to be made and progress to be achieved. We are so fettered by rules and regulations that it takes about seven years to get a river defence completed.

Oh, and please can we have our urban drainage systems mapped, properly understood and regularly maintained?

And then there is funding........ need I say “MORE!!!”?

---

**Flood Management Philosophies**

By Janet Jones – Penplas Flood Action Group in Swansea

The first step in devising any strategy should be to acknowledge that the strategy, and everything that follows on from it, is governed by a corporate philosophy (whether there is one written down or not!). Get the corporate philosophy wrong, and the strategy, policies and procedures will also be wrong, and a lot of public money and manpower will be wasted and people’s property and lives will be damaged and, in some cases, destroyed.

A philosophy is a combination of attitude towards, and the reason for, doing something. Here are some examples:

- a. Let’s see how much money we can save.
- b. We’ve got to do something because the law’s changed.
- c. Let’s just be seen to be doing something.

Continued...
Flood Management Philosophies (Continued)

I apologise that I don’t have time to enlarge on the thinking behind these philosophies and the outworking of them, so I invite the reader to consider how effective any flood prevention/management scheme is going to be if the thinking behind it is one of the three philosophies above.

Now consider the following philosophy:

We really care about people and what they and their children suffer in flood situations. We really care about the fact that their homes are wrecked, and the lives of their children are wrecked because they never recover from the trauma.

The first policy that will come out of this philosophy is:

We must do everything we possibly can to ensure that people never get flooded again.

See the difference?

This might sound like an expensive policy, but compare it with the following policies:

* Let’s do as little as possible as cheaply as possible.
* It doesn’t matter if we get it wrong.
* We'll only protect up to a point.

I have witnessed, over time, a council spending sums totalling millions of pounds implementing policies just like these. Over a period of thirty years, in order to counter a flood problem, they have put in a culvert and land drains, increased road drainage, revamped a land drain and raised the level of a main road, yet the flooding continues.

The cause of the flooding is due to a large expanse of playing fields having been designed to direct surface water into a housing estate. If they’d had a philosophy of real care, then they would have really gotten to grips with the problem in the first instance and would have redesigned the fields to tilt towards adjacent waste land - job done. Expensive? Yes, but actually less costly than the total of what they have spent so far. And, had they done this in the first instance, tens of families would not have suffered extreme losses and trauma.

The reality behind such philosophies is:

a. Let’s see how much money we can save - delusionary thinking!
b. We’ve got to do something because the law’s changed - "We don’t really care!"
c. Lets just be seen to be doing something - not very intelligent thinking!

Before any work begins - even at this consultancy level - the right philosophy needs to be put in place. The only right philosophy is:

We really care about what flood victims suffer. We will do everything it takes to ensure that these properties never get flooded in the first place or will never get flooded again.

With this philosophy in place from the outset, every future ruling/policy/procedure will point towards getting the job done right first time, thus circumventing the otherwise inevitable waste of public money and the repetitive flooding of homes and traumatising of families. We have young children in our area who, two and a quarter years since being flooded, still cry and scream in their sleep and who are traumatised again and again every time there is heavy rainfall. These young children have been damaged for life. We have women who have developed serious, long term health problems after being waist deep in sewerage contaminated water in their own homes. When experiences of this type are allowed to recur it demonstrates nothing short of criminal negligence. This must stop.

Continued...
Flood Management Philosophies (Continued)

With this philosophy of real caring in place, there will be an end to building of properties in flood risk areas; and every effort will be made to protect people from flooding (in areas where this may be impossible people should be offered comparable accommodation elsewhere at no extra cost to themselves.)

Where people are affected by flooding, a philosophy of real caring again needs to be applied to help them through the experience and the aftermath. Why is it that we can put together crack teams to help victims around the world when tragedy hits but, in our own country, we ignore them? Our own people need help and support just like those in other countries. As a pensioner I have experienced flooding and know what a struggle it is to deal with the aftermath.

Time for a Radical Re-think

By Roger Fell (Lower Trent / Nottingham Undefended Downstream Villages)

The note by your Northants correspondent (February Bulletin) will strike a chord for many of us who have tried to deliver answers in local communities since the 1998 floods. I talk of those of us who recall the efforts of Gill Holland in the early days to extract information and to create a voice for those on the River Severn.

Everything stated is an accurate reflection of the frustration and growth in lack of credibility and I suspect is shared by the majority of the victim population. This week the new flood river levels web information crashed or was hopelessly out of date: a simple information portal for river levels which should be capable of providing "live" value levels no more than one hour old. It is in BETA stage development - and clearly hopelessly inadequate but potentially an excellent tool to inform the "at risk" population / business sector. There is no effective "predictive" data which should be possible on the major rivers such as Thames, Severn and Trent as examples. The issues for flashier rivers is an accepted problem in terms of flood warning. The new system is clearly not an improvement on its predecessor at this stage.

Despite many able individuals within the Environment Agency (EA) the bureaucracy and top-down formula system to allocate resources seems to consume the meagre budgets. A recent request for a schedule of expenditure on the Lower Trent in the Nottingham area on consultants and modelling exercises was answered by "we do not know" the expenditure since 2000 (when the last major Trent flood occurred). There needs to be public transparency on who is being paid what sums for what work: It is taxpayer money not private commercial activity where confidentiality is accepted.

A local small earth bund of 110 metres length to protect some half-dozen properties from a flood of the equivalent scale in 2000 exhibited breath-taking delays and incompetence on project management: What could have been done by any local ground worker business for less than £20,000 eventually required Committee agreement to go over £200,000. Costs are out of control with 60% optimisation allowances for errors and omissions.

Locally the flood modelling is being used incorrectly to deal with the detailed assessment of a potential scheme DESPITE all the information stating that the modelling is NOT suited to such macro level assessments but is suited to strategic generalisation. The inputs to the model appear to contain critical errors and omissions. The assessment of Return Periods is hopelessly inaccurate with basic abuses of statistical methods. There has been consistent refusal to acknowledge very detailed empirical evidence of real flood levels and duration etc. provided by the local flood group work commended by consultants for the detail and accuracy.

The truth is that there is an apparent "gravy train" of commissions to external consultants to produce end results which are sometimes complete nonsense - but that result is then carried forward as the "truth" despite the photographic evidence to prove the contrary.
National Flood Resilience Review

The Review, led by Oliver Letwin, will assess how the country can be better protected from future flooding and increasingly extreme weather events. It will focus on four key areas: updating our climate modelling and stress-testing the nation’s resilience to flood risk; assessing the resilience of our important infrastructure like electricity substations; our temporary defenses; and our future investment strategy.

Topic areas in their consultation form are as follows:

- Future flood risk
- Communicating risk and uncertainty
- Other countries responses to flood resilience
- Other countries approaches to improving flood resilience for communities
- Temporary measures to improve resilience of infrastructure

Requirements for submission of evidence

The deadline for submissions is 4 March 2016. They will consider evidence that has either been published in a peer-reviewed journal or evidence that has been published elsewhere following an independent review process.

You will be asked to provide a summary of the content and an explanation of how the evidence relates to the review questions for each piece of evidence you submit. Full copies of evidence should be provided in pdf format or web links to full copies. Please note Defra has limited access to online journals so we would need to be able to access evidence via open-access means.

---

Time for a Radical Re-think (Continued)

For various reasons the structure of DEFRA / EA is mired in a process of finding reasons NOT to do something rather than say "let's try something as a best effort and see if there is improvement. It is felt that this is caused by far too many non-engineering voices and threats of legal challenge. The "Human Habitat" is relatively unprotected in legal terms when compared with the vague concepts of bio-diversity and wildlife habitat. The sense is that the concept of proportionality has been lost.

There is no "DEFRA Formula" to cover the instances of where a community is marooned from access by emergency responders - and of course normal economic activity. The only measure is the number of households at risk of flooding - the picture is far greater than that in many communities. Every time there is a peak of flooding the answer is to appoint yet another form of "enquiry" into what went wrong.

Bye and Pitt have provided copious evidence of the issues over the last 15 years.

Despite all the evidence flood protection is still being promoted in places such as Derby as a method of releasing "developable land" on the protected floodplain rather than adoption of a long-term 50 - 75 year "managed retreat land use programme. In Nottingham developers are rushing to build in the newly protected zone.

Perhaps the time has come to split the function of flood management and protection into the role originally held by the major river authorities run by fully qualified engineers: the conflict within the EA of environmental issues and hard engineering has to be removed. As a final underpinning the River Authority must be given the absolute power of primacy on floodplain through the creation of long-term strategic land planning and the removal of short-term political convenience planning timescales to secure votes through unsustainable pledges and promises.

David Rooke has said publicly that the entire system has to be reviewed: the previous Reports by Bye and Pitt have set out the issues clearly. The political issue is the stumbling block, with a radical rethink about the role of DEFRA / EA.
The Committee invites written evidence on four key topics:

- **Predicting the future**: Are the Environment Agency and Met Office models that predict rainfall patterns and the likelihood of future floods fit for purpose – and do they correctly calculate the costs of future flooding to communities.

- **Protecting communities and infrastructure**: How adequately do defences protect communities and agricultural land from floods and do current funding arrangements target spending in the right way?

- **Managing water flows**: How effectively do Defra and the Environment Agency’s policies encourage innovative approaches to managing risk such as slowing the flow of water in urban and rural river catchment areas and promoting water storage?

- **Planning for floods**: How well do planning policies ensure new buildings are not put in areas of high flood risk nor where they would increase risk to others – and how well do new developments incorporate sustainable drainage and flood-resilient buildings?

In addition, the Committee will as part of this inquiry look at flood insurance. With the new Flood Re scheme coming into operation in April, written evidence is also welcome on how accessible and affordable flood insurance will be for businesses, as well as householders covered by the scheme.

**The deadline for submissions is noon on 15 March 2016.** Written submissions should be made via the Future flood prevention inquiry page on the Environment, Food and Rural Affairs website.

**LINKS TO REVIEWS**


We also believe that there is to be a Floods Commission in York and a Scrutiny Panel in Bradford. If you are aware of further details or other reviews happening elsewhere, please let us know.