Household flood resilience and protection: Defra consultation workshops

Summary of feedback

November 2008

sharing knowledge
building best practice

Consultation workshops delivered by CIRIA and LANDF♦RM on behalf of Defra Flood Risk Management in October 2008.

CIRIA/LANDF♦RM Contract 163

Version 4.a

Contents

Defra and LANDF◖RM are grateful for the contributions and useful feedback provided by those that attended the consultation workshops.

1. Overview

Household level flood resilience and protection measures can help reduce damage, disruption and negative impacts on health. They provide a more effective alternative to the use of sandbags and can significantly reduce recovery time and clean-up costs, making it easier and quicker for people to move back into their homes.

Less than 30% of people whose households have been flooded take any steps to make their homes more resilient to floods or to reduce water entry. Research suggests people will only normally take such steps when they have been flooded more than once. The main factor to encourage people to implement flood resilience or protection measures is likely to be when they believe that these measures will make them feel safer in their homes. The main disincentives are concerns that these measures will be expensive and the perception, amongst some householders, that flooding is the fault of the authorities and should therefore be dealt with by the state rather than by individuals.

Defra outlined proposals to encourage wider uptake of measures in their *Consultation on policy options for promoting property-level flood protection and resilience*, (Defra, 2008) where people living in areas with very frequent flooding would be offered free advice on how to reduce flood damage and, possibly, subsidies towards the costs of those measures, although the amount of money available from the Government is limited and could only provide subsidies for an equally limited number of homes.

Despite this, Defra hopes that the proposed schemes will increase the supply of products and advice and encourage flood protection by households making increased resilience and protection a more normal response to high levels of flood risk. In the past, Defra successfully conducted a similar pilot scheme that provided flood protection grants to householders around England.

Approach

In October 2008, Defra and LANDF♦RM, the local authority network on drainage and flood risk management (run by CIRIA), delivered a series of regional workshops to consult on Defra's draft proposals for promoting household flood resilience and protection. Workshops were held at:

York, The Hospitium Yorkshire Museum & Gardens	15 October 2008
Manchester, Manchester United Football Club, Old Trafford	17 October 2008
Bristol, Novotel Bristol Centre, Victoria Street	23 October 2008
Reading, Defra Innovation Centre	24 October 2008

The workshops provided a platform for dissemination and consultation with relevant stakeholders. Representatives from Defra, local authorities, consultants and the National Flood Forum presented at the workshops providing guidance on measures, results of research and pilots together with lessons learnt from initiatives. Feedback was obtained from three hundred delegates that included local authority officers, Environment Agency staff, insurers and people who had themselves been flooded.

Workshop programme

Workshops were structured with overview presentations in the morning followed by a question and answer session. Subseqent presentations augmented information in the Defra consulation and informed group breakout sessions, where groups discussed questions on policy approaches presented in delegate workbooks and ultimately completed the workbooks in pairs (or threes as required) for later analysis.

Delegates were given the opportunity to share feedback/findings of the breakout sessions with the wider group. This was useful in sharing information and encouraged knowledge transfer to inform the various stakeholders for their own formal submition to the written consultation.

Feedback from the workbooks and discussion sessions has been captured in this report and is summarised in chapter 3. Programmes for each of the four workshops are contained in Appendix B.

Presentations

The workshops included a number of presentations from practitioners working for local authorities, Defra and those working with people that have previously been flooded. The practitioners provided an overview of approaches to flood resilience and protection, and Defra representatives provided information on research, the pilot project and consultation. Information on case studies and stakeholder engagement was also provided by relevant organisations. Presentations can be found on the LANDF♦RM website (www.ciria.org/landform).

Biographies for all of the speakers at the workshops are included in Appendix C.

Feedback

Delegates believed that household level flood resilience measures could provide a useful contribution to managing flood risk given some of the difficulties and limitations of implementing flood protection measures, particularly at a community level. However, it was recognised that public perception of resilience measures is usually unfavourable due to potential inconvenience, stigma and impact on property values. It was also suggested that a lack of knowledge about flood resilience and protection measures may hinder uptake but it was thought that this would be relatively easy to overcome.

The uptake of household level flood resilience and protection measures could also be encouraged by raising awareness and sharing knowledge by facilitating dissemination of knowledge and capacity building amongst relevant professionals. The importance of engagement with communities via meetings, newsletters etc was also highlighted and it was suggested that local authorities and the Environment Agency play a key role in this process.

The role of financial incentives and approaches to stimulate innovation and uptake of measures was also discussed. There was broad consensus that more was required to open up the market for new flood resilience and protection measures by making the accreditation process for products easier and more affordable.

In terms of policy options, there was overwhelming support for option 2 where government would provide grants to subsidise the costs of resilience and protection measures. It was suggested that grants would facilitate greater uptake of measures proving a greater level of consistency and allow local flexibility. There was strong preference (70% of delegates) for the scheme to be based on flood risk rather than means testing ability to pay for measures.

When asked about capping subsidies for individual households many of the delegates suggested that more information might be required. However, in the interim there was agreement that the subsidy level of £5,000 used in the pilot studies was a reasonable value.

Delegates at the workshops suggested a number of changes to the Government's draft proposals and provided a great deal of useful input into the policy development process. These views will be taken on board by Defra as they review proposals over the coming months. The final policy will be announced in April 2009.

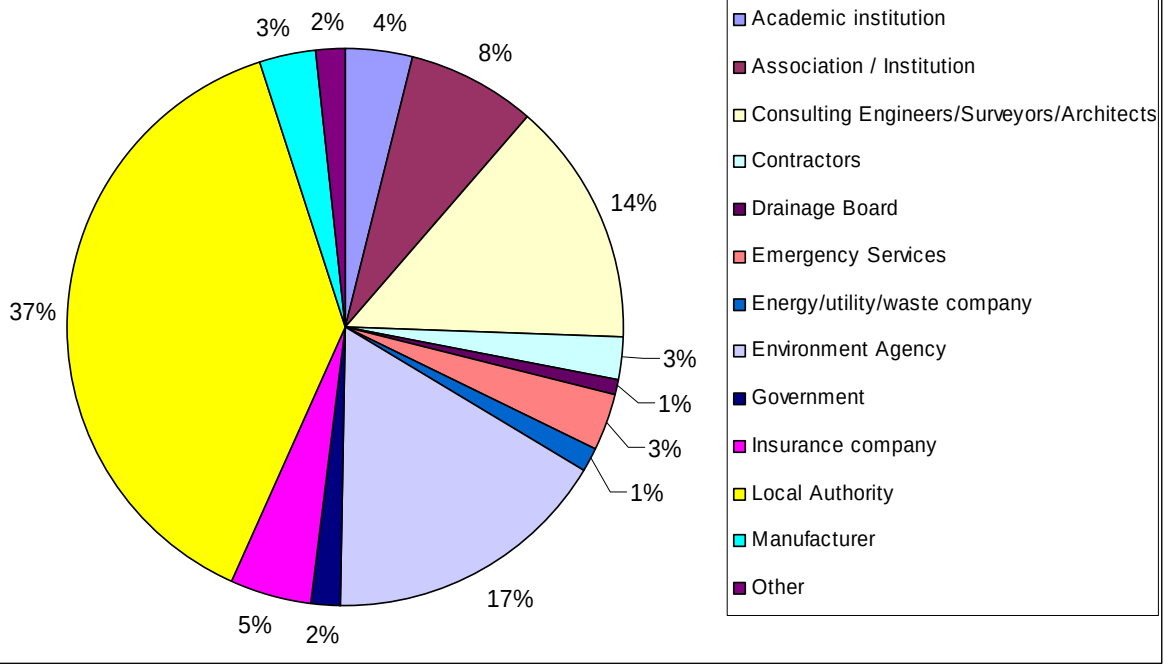
For information on the workshops, including access to the presentations given, please visit the LANDF♦RM website (www.ciria.org/landform).

2. Workshop attendance

Figure 1 provides an overview of the delegate's that attended the workshop. The majority of delegates were from local authorities, with a significant number of representatives from the Environment Agency, consultancies and relevant associations/institutions such as Royal Institute of Charted Surveyors (RICS).

Delegate lists from each of the four workshops are contained in Appendix A.

Fig 1. Workshop delegate demographic (combined for all workshops)



3. Feedback from the workshops

Section 1 General feedback

The questions posed in this section cover delegate's general understanding of household flood resilience and protection measures and the challenges of implementation. Questions also explored approaches to raise awareness, expertise, encourage innovation and uptake of resilience and protection measures.

1. Do you think that the evidence presented on the effectiveness and appropriateness of protection and resilience measures is accurate?*

Yes	**42.2%**
No	**57.8%**

*question asked at York and Manchester only

Of those that answered "No", there was general consensus that:

- no examples were provided of situations where the measures had been tested in a flood situation
- the evidence presented did not address or differentiate between issues related to new and existing buildings
- the evidence did not differentiate between different areas, types of area and property, multi incidents
- the cost benefit analysis did not mention what time frame was being covered for people's perceptions/emotions.

Another note was:

> *"There is a "middle" version of protection not really mentioned. Between the large scale, community based solution and the small-scale, domestic one, there is a home-owner operated "neighbour level" type of protection. For example, neighbours storing and deploying a small barrier away from properties - a resistance type of barrier. Also, a single property can be protected by a small, free-standing barrier - instead of sandbags. Every case is different and it doesn't always have to be a case of surrounding the whole property to avoid water to enter the property."*

2. What do you believe are the main barriers to the take-up of household flood protection and resilience measures?

The main barriers to take up were identified. These include:

- the cost of measures
- the inconvenience and potential adverse effect on property in terms of stigma, blight, property value and aesthetics
- psychological considerations (the scale of the problem)
- denial, abrogation of responsibility (someone else's problem), and not taking ownership
- lack of knowledge and expertise

- reactive (rather than proactive) approach to flooding incidents
- lack of fairness where other areas are thought to have flood protection provided by other organisations
- apathy and perception that the risk of incidents is small
- the perception that insurance meant that they would not need to worry about implementation measures
- concerns about reliability of equipment and measures
- bad example set by public bodies - council housing stock not being protected
- issues regarding old/listed/protected buildings even temporary structures.

3. What do you perceive to be the role of household level flood resilience measures in flood risk management?

The following responses were provided by delegates:

- household level measures are very important given the limitations of protection for flood depth, frequency, duration
- the implementation of measures requires an understanding and acceptance of risk
- there is a perception that measures help limit damage rather than manage flood risk
- measures do not reduce risk to life, only risk of property damage
- perception that measures are only appropriate to protect properties that won't qualify for a flood defence scheme
- measures may provide some level of community/householder empowerment, engagement and cooperation
- measures may reduce anxiety levels
- measures may reduce damages and length of time of disruption following flooding
- measures may reduce costs to the insurance industry
- the public perception is usually unfavourable to resilience measure, except for non-habitable areas (eg garages and bin stores). There is a perception of larger role for commercial buildings
- new build developments should have resilience measures built in
- the perception of measures depends on your location and risk of flooding.
- the perceived importance varies with location and is thought to be much more important in areas where frequent flooding occurs
- measures are thought to be useful for areas where a community level scheme is uneconomic or technically not feasible
- resilience measures may be useful in cases where flood protection measures may have a detrimental effect downstream
- measures are an essential element of a holistic approach to flood risk management but should not replace large community schemes
- flood water is not being automatically kept out any longer and it is necessary to change the current mindset of the communities by taking ownership of problem, being proactive and taking on some personal responsibility, ,.

4. How can householders be encouraged to implement resilience and protection measures?

The following suggestions were given by delegates:

- better communication and education of benefits. Liaison with community groups may be more effective than approaching individuals.
- encouragement will have to include grant at some level. If insurance companies will not fund betterment, can there be a grant system that augments the insurance work to facilitate the delivery of resilience work at the same time, in which case only incremental costs would be incurred?
- financial incentives (subsidies / grants) including reduced insurance premium if resilience measures are adopted
- strategic thinking during administration of schemes to avoid bureaucracy
- changes in legislation and regulations (eg Building Regulations)
- proof of effectiveness and demonstration through dissemination of successful case studies
- advertising of flood resilience measures in areas where flooding is an issue
- better design and more socially acceptable products
- target properties at greater risk with information
- publicity of the different forms of flood risk and how they can be better managed.

5. How can the Government encourage new, innovative flood protection products, while also ensuring a robust system for testing new products?

Suggestions from delegates included:

- reduce the cost of the kitemarking process. Make it more accessible to innovative small firms (perhaps open certification role up to universities?)
- provide more central funding of product development and national accreditation
- support discounted testing procedures (grant aid testing)
- undertake market research into size of flood defence market
- develop financial incentives eg grants, VAT exempt products (similar approach to energy efficiency products)
- provide investment in setting up a 'test centre/guidelines'
- review other countries approaches for ideas
- develop a more effective approval system than kitemarking, eg British Board Agrément (BBA), Building Research Establishment (BRE)
- the industry required both kite-marking and professional accreditation
- the government somehow needs to support a market for the new innovative products
- approaches need to encourage use in new buildings
- demonstration of products in community buildings in order to promote implementation
- building resilience into building assessment schemes eg Building Research Establishment Environment Assessment Method (BREEAM) and others
- following successful tests for product, refunds could be provided
- provide grant assistance or re-payable loans to develop products and subsequently provide support throughout the length of the approval process
- develop a large scale research park, eg the flooding equivalent of the BRE innovation park to simulate quicker "real world" effects.

6. How can we best reassure the public about the effectiveness and suitability of flood protection and resilience products?

Suggestions from delegates included:

- develop and disseminate appropriate information reinforced with data, case studies and experiences - try to appear open honest and trustworthy
- provide greater awareness regarding the purpose of Kitemark scheme
- link the localised flood risk survey with those who will undertake the work; this may reduce the requirement for householders to undertake research
- provide more demonstration projects and evidence that these measures work
- develop guidance on how to install and operate the measures
- seek and obtain popular support (e.g.TV and media)
- lead by example with measures included in council housing, iconic buildings, and shopping centres
- the Kitemark system must be adopted universally and possibly extended to cover installation
- ensure that surveyors recommend complete, not partial solutions
- the Kitemark system must be supported by all relevant government, professional and trade organisations
- the insurance industry should support schemes
- the dissemination of independent testimonials (via websites, DVDs, etc.) from organisations like the National Flood Forum, Environment Agency, etc.
- the development of "show houses" for householders to visit and see protection, resilience and restoration approaches
- develop financial incentives through (government approved) reductions in insurance premiums and council tax where government approved products are used by householders.

7. Which professional groups could best deliver household flood risk surveys?

Suggestions from delegates included:

- local authority staff, building control officers, technical officers in housing, environmental health officers etc.
    - local authorities would be seen as impartial with no hidden agenda to sell flood products (no commercial bias)
    - local knowledge of flood risk, strategic flood risk assessments (SFRAs) etc.
    - professional accreditation /qualification can provide public confidence
    - economies of scale and practice
- local authorities should lead through emergency preparedness/resilience forums). Further funds are likely to be required
- Home Information Pack (HIP) assessors
- Chartered Institute of Building Surveyors (CIOBS) or similar
- independent, trained building surveyors with a background in water management. They need to be independent so that they are not looking to make commission on their sales
- development of a national register of those competent in undertaking flood risk surveys

- use already existing surveyors and train them further. They need to be trained in a variety of skills, such as hydrology and flood risk etc.
- appropriate surveyors registered under RICS
- civil engineers/structural engineers/chartered surveyors - complex skill set required, eg structural, geotechnical and hydraulic expertise
- PCA (Property Care Association) surveyors who have knowledge in the effects of damp on timber and other building materials
- relevant research organisations like TRADA, BRE and similar organisations
- competent people who understand flood risk management and PPS25
- local authorities in the case of individual properties, consultants for larger sites (multiple properties - greater value for money).

Of all the individuals, associations or institutions that have been identified above, it was believed that there are also some characteristics or particular skill sets that should be uniform across the board. These are:

- professionals need to have professional indemnity insurance since this system needs to work within existing framework of household surveying
- the people must have the broader competencies to deliver a solution that deals with the particular local issues (e.g. sewers, groundwater, runoff)

8. What more needs to be done to increase capacity and expertise on flood risk issues amongst these professional groups?

Responses from delegates included:

- devise training courses and Continuing Professional Development (CPD) with RICS, Institute of Building, Chartered Institute of Loss Adjusters, Chartered Insurers Institute
- it may be possible to introduce capacity building through HIPs
- a complex skill set is required, eg structural, geotechnical and hydraulic expertise
- it might be useful for a nationally approved scheme (similar to CORGI for gas safety).
- RICS should oversee the training and approval of surveyors in the same way CORGI oversee gas
- IEE and CORGI should also be incorporated to ensure electrical and gas safety for resilience measures
- the proposal of a two stage assessment process needs to be given some consideration - one survey for flood risk assessment (using Environment Agency maps etc.), second survey for property protection identifying routes of ingress etc.
- there may be benefit from new academic standards and professional qualifications
- the National Flood School offers post-flooding advice - consultation with this body regarding prevention should be considered
- it might be beneficial to financially support local authorities in creating and sustaining the role
- compulsory Continuing Professional Development (CPD) items for all building professionals.

Other comments raised on the topics covered in Section 1 included:

- promotion of resilience measures at schools in order to communicate the message to young people, who will in turn convey the message to their parents
- information needs to be presented in such a way that everyone can understand it (implementation of these measures is applicable to very different communities/ individuals)
- should enforcement be considered for householders that may put other householders at risk by their inaction?
- the grants are being earmarked for spring 2009, however the majority of local authority budgets will have been agreed prior to this.
- insurance companies should assume greater responsibility in this process since they benefit most from resilience measures being implemented
- the Pitt Review of the summer 2007 floods identified the need for increased numbers of 'engineers' in local authorities
- some flood protection/resilience measures may not be approved for listed buildings
- what length of time is considered for effectiveness of resilience measures? 5 years/10 years/whole life?
- surface water management plans could be used to facilitate prioritisation.

Section 2 The policy options

Questions posed to the delegates sought views on the effectiveness of the two options presented in the Defra consultation. The two options were:

- Option 1 - free home flood surveys for households in at-risk communities
- Option 2 - government grants to subsidise the costs of resilience and protection measures

1. Views on option 1 – Free home flood surveys for households in at-risk communities

Option 1 could work well because:

- it provides a standardised UK approach
- it improves confidence of the householder in the recommendations to make an informed decision
- it provides free surveys which will raise awareness and encourage self help and self empowerment
- it provides consistency (same assessors/surveyors could be used)
- benefits from economies of scale can be achieved through a greater number of properties being surveyed
- it should reduce the occurrence of bad practice from "cowboy" builders
- it creates bespoke flood risk assessments/mitigation approaches
- it will provide records for a vaster knowledge database
- it identifies priority properties
- it reduces the stigma if entire streets are surveyed (ie nobody will be singled out)
- it would promote the implementation of flood resilience and protection
- it could lead to community buy-in if a single flood mechanism is identified for a given area
- rural areas will benefit more than they do currently

- it provides Government with information on housing stock.

Option 1 might not work well because:

- it precludes community action and collaboration
- people will end up with different products
- if it is not supported with grant aid to undertake work, it will limit take up of surveys
- householders would be under no obligation to have any work carried out
- some groups, especially older people may be reluctant to allow people into their home
- homeowners may not want to know if they are at risk as it may affect the future value/re-saleability of the house
- the report could create anxiety, people will be aware but unable to take action due to costs
- surveyors might not have the relevant knowledge to provide a robust and independent view which covers all aspects, ie what are the options, what type of products are available and what can they do?
- timescales are prohibitive - does this have an impact after initial survey?
- funding could be wasted if there is limited take up
- it could blight an area and impact on the process of selling property
- it would raise expectations of work to be done
- information in the survey may lead to difficulties in obtaining insurance
- the stigma of being identified as a flood risk
- there are not enough trained surveyors
- surveys may not be followed up on
- it may depress housing market in flood risk areas
- data protection issues may introduce complications, who will own the survey? This may persuade people to refuse participation in the survey
- it may lead to an increased fear of flooding
- information could potentially become part of public domain
- it may create false impression that enough has been done by identifying the issue and that flood resilience measures may not necessarily need to be implemented
- it may generate bad public relations if householders cannot pay.

2. Views on option 2 – government grants to subsidise the costs of resilience and protection measures

Option 2 could work well because:

- more people would implement the recommendations, providing continuity between groups of houses
- it provides a complete service, (ie survey and grant to implement the requirements) which is more likely to be taken up
- it would decrease flood risk in a significant number of homes
- it encourages people who would not normally be able to afford it to take up measures, reducing the risk of downstream impacts
- it provides a more standardised approach and consistency of installation
- people would see tangible, physical results
- it demonstrates the Government's commitment to the issue
- fewer surveyors are required
- it encourages take up and therefore helps reduce localised stigma

- it overcomes the “terraced house” effect and promotes community resilience
- it creates a market for the products which may in turn lead to more supply, therefore reducing the costs of implementation of measures
- it mitigates potential flood costs
- these properties could act as exemplars and catalysts for further uptake
- there is more likelihood of communal approach.

Option 2 might not work well because:

- there may be a tighter limit on numbers that can be tackled
- it is potentially divisive, neighbouring communities or streets may not understand why they are not getting the free survey and protection and could be seen as waste of money (tax payers money)
- it would require "buy in by all" to increase community resilience
- there could be a reluctance to implement the necessary measures unless the full cost is met
- homeowners might not be willing to pay the remainder of the costs involved if only partial subsidy is provided
- the development of social stigma, where people don't take up the option due to it being perceived as "charity"
- it will be difficult to decide who gets what, and it will be even harder to decide where money is spent
- there is a lack of capacity in building trades/specialist area
- there may be a requirement to include commercial properties, eg corner shop at end of a terrace (hub of the community) that, if left out, would compromise scheme
- it would create provocation in the community and it would be difficult to define eligibility fairly
- competition and/or controversy around the allocation of subsidy funding
- on-going costs such as maintenance are unclear - who should foot the bill when the scheme ends?
- more time will be spent on selecting area of implementation
- it re-enforces the mentality that the Government is responsible and increases expectations that the Government will make more grants/funding available.
- should the proposed system fail, insurance companies might turn back to government to fund recovery
- there may be a lack of ownership of products and risk
- local authorities may not have the capacity/resources to deliver the work
- mixed tenancy of buildings provides uncertainty.

Preferences

Option 1	**14.5%**
Option 2	**85.5%***

*It is important to note that a number of delegates suggested that a combination of both approaches was most appropriate.

Reasons given for the preference of Option 2 were as follows:

- the option offers the full package to the homeowners
- option 2 would be more inclusive and coverage would be complete
- the option is more likely to kick-start the scheme and thus raise profile of protection and resilience

- it will better test links and liaison between the different parties
- it will allow quality assurance of installation and thus support future efficacy assessments
- option 2 would produce some examples and encourage future take-up, helping to mainstream flood resilience
- option 2 will allow for local flexibility.

3. How can Government ensure that any future grant scheme is simple to administer but also fair?

Responses from delegated included:

- The development of a scoring system based on depth, frequency, damage etc. of the flood event (the occurrence of real flooding events will score higher)
- develop the scheme through local democratic decision making
- the scheme could be overseen in a similar manner to Home Improvement Agency for home improvement grants
- the closer the scheme looks like existing home improvement grants, the more accepted it should be
- the scheme should force landlords to pay as tenants may be on benefits and are more likely to have means to implement the measures
- any scheme will be challenging as it is difficult to satisfy everyone, any scheme will be viewed as unfair to somebody
- the flood grant should be aligned with other grant schemes
- the scheme must be transparent and clear
- the scheme should be administered by local authority
- the scheme must keep up-front costs to a minimum
- the scheme needs to be based on risk assessment
- the scheme should be supported by trained people to assist the application process. Clear guidelines should be established well in advance.
- the scheme should be based on a percentage contribution up to a ceiling sum
- the actual percentage could be means tested (eg as is done for home insulation grants) or deprivation-biased (eg as in Project Appraisal Guidance for flood defences)
- the development of a national template of "how to administer a scheme" may help
- the use of existing knowledge like SFRA's and flooding databases could be useful in operating the scheme.

In addition to options 1 and 2, the following options were suggested:

- Option 3 - apply the approach to streets/rather than individual houses
  - provide block grants to local authorities
  - offer surveys and grants to businesses and regeneration areas, not just households.

- Option 4 - add these measures into regeneration packages
  - allow the surveys and grants to be used for post flood improvements by allowing insurance companies to supplement the repairs to original standard with a grant to improve resilience.

4. Should any subsidy scheme offer full subsidies to a small number of high-risk properties or offer partial subsidies to a larger number of properties?

Full subsidies to small number of high-risk properties	**37.2%**
Partial subsidies to larger number of properties	**26.9%**
Undecided	**35.9%**

The following comments were made:

- are private landlords considered to be commercial or residential?
- a partial subsidy would only go so far and some householders would not spend any more, so is partial subsidy solving any issues?
- people who experience flooding regularly should be given full subsidies, whatever the circumstances
- to achieve full take up and implementation it is likely that full subsidies will be required
- covering a larger number of properties would be preferable as it provides greater visibility of the concept and encourages greater uptake

5. If a cap were put on the level of subsidy for individual households, what should the level of that cap be?

There was general consensus that more information would be required in order for the delegates to make an informed decision, however, the majority of delegates agreed in principle that the figure of £5,000 taken from the pilot studies was a reasonable value.

Other comments included:

- it would be useful if a minimum starting point for all properties was suggested to provide minimum cover and then develop an approach that considers the actual works.
- a subsidy cap should be set at 60-75% of cost of work
- it is difficult to set a cap since householders could spend between £1k-£20k on flood improvement measures
- any decision on capping should be informed on a cost-benefit and risk basis
- in the P10 Scheme most schemes are undertaken with a £5k band.
- two different levels could be set, one lower (for protection) and one higher (for resilience)
- no subsidy cap should be set as this may result in works not being either adopted or effective
- the level of cap could be based on the property/council tax band
- the cap should be set at a similar formula/rate of the cap set for applications for renewable energy
- level of cap could depend on individual scheme, why cap at say £4,000 when £6,000 may provide more benefits and ensure an increased take-up?
- there are too many variants in the assessment ie large house, small house, flat etc. which makes the setting of a cap too complicated
- delegates raised concerns about any level of funding or cap, questioning the reasoning behind installing measures that will only go part of the way to

protect the property. If a property is flooded after measures are taken, then the whole scheme will be discredited
- a number of delegates suggested having a 100% grant, 25% of which is a loan which has to be paid back over 5-10 years using monies from reduced insurance premiums. This may maintain buy-in and ownership of the measures implemented.

Other comments raised on the topics covered in Section 2 included:

- the question of whether there will be funding for community buildings in the grant scheme was raised
- there seems to be very little discussions/considerations of the potential impact the Association of British Insurers (ABI) can have in this process and there may be a missed opportunity in developing subsidies and other incentives
- the question of what the 'conversion rate' is expected to be from people being offered advice to taking action was also raised
- the reach of the scheme was also questioned if only surveys are to be provided
- there are communities (particularly those in rural areas and on floodplains) who are seeking some measures following the summer 2007 flooding, but are not eligible for Grant Aid or Local Levy schemes because the business case is not robust enough. These communities could be targeted as pilot studies for whole community protection/resilience and the householders will probably be more willing to contribute financially
- tenants in rental properties need to be considered fully. Landlords may not want to participate in a scheme, even if the tenant has been flooded
- in the first instance, areas that are already engaged and lobbying for change could be targeted, or those areas where individuals (eg community officer) have already changed attitudes and identified a need (an example of Barnsley was given).

Section 3 Stakeholder engagement

Questions posed to delegates in this section covered approaches to develop partnerships with organisations, communities and individual homeowners to deliver flood resilience and protection schemes. Questions were also raised about the coverage and provision of subsidies to different parts of the community and the level of flexibility provided.

1. **How could local authorities, the Environment Agency and at-risk homeowners and communities best work together to deliver household flood resilience and protection schemes?**

Responses from the delegates included:

- possibly link schemes to Cabinet Office work via Civil Contingencies Secretariat in relation to community resilience programs (Local Resilience Forums). There could also be links via local authorities flood review committees following summer floods of 2007
- the development of flood action groups provides a focus from local community

- facilitate and encourage local communities to listen to local authorities since they are there to help and also for local communities to be constructive with their feedback
- the scheme could involve previous victims of flooding to act as intermediaries, in similar manner to the work of National Flood Forum
- local community groups should be encouraged to approach local authorities, not other way round
- a project manager should be appointed within a local authority with the specific aim to engage with organisations and communities
- the scheme also needs to engage with utility companies (sewerage undertaker), as people often have rigid ideas/beliefs of where the problem lies which are often incorrect
- public sector bodies should act as facilitators only, allowing the community to define itself
- schemes can start by using existing community groups, for example Parish councils, faith groups, Woman's Institute etc.
- all organisations involved need to be prepared to listen, gaining an understanding of the different types of flooding and how they interact.
- all organisations need to be honest and open.

What should their respective roles be?

The Environment Agency should:

- have an overarching role, acting as "project directors" to provide consistency and bring national criteria forward
- identify at-risk areas as well as those areas which could work together as a community to be responsible for providing strategic overview of a particular area/region
- play a technical role by providing advice on technical aspects of flooding and flood protection, including providing model outputs and guidance on maintenance of records
- provide data on risk identification/quantification
- set national criteria for selection process
- give flood warnings and lead on emergency planning
- disseminate outputs from Strategic Flood Risk Assessments (SFRAs) and catchment studies.

Local authorities should:

- provide a facilitation role, acting as "project managers/coordinators", bidding to Defra for funding and subsequently administering schemes
- provide linkages between the Environment Agency and community, involving a wide range of local authority officers eg building control or planning
- act as project manager, the most likely candidate would be a drainage engineer. The role would include facilitating discussions with building control officers/surveyors/emergency planning departments etc.
- provide the main link with the community – have established links through community groups/forums
- contribute local knowledge and emergency response information
- potentially include local MP in discussions/community workshops to reassure the community

- oversee the survey works including the education of surveyors to meet the objectives of the exercise, also taking on board information from experiences in other regions
- arrange and lead meetings and consultations
- use local knowledge to decide on the suitability of particular schemes and products to the local area with reference to Environment Agency data.

Homeowners and communities should:

- if possible, develop flood groups - putting a local and human face on issues. Links to these groups would be via local councillors/flood wardens
- take ownership and responsibility of the issues and mitigation measures being implemented
- accept that they have a role and cannot be bystanders
- prepare for a flood both individually and as a community
- be prepared to work proactively with external stakeholders
- be encouraged to voice opinions over which solution best fits them as a whole
- define their own scheme under the guidance of the Environment Agency and local authority
- realise via national awareness campaign, Civil Contingencies Secretariat (CCS) and The Cabinet Office, the role they have to play in enhancing overall resilience prior to, during and after major emergencies (including flooding events).

2. What would be the most effective ways of consulting with members of selected communities in order to engage them fully in the schemes?

Responses from delegates included:

- the development of drop-in sessions, getting the right balance between group briefings and one to one information/counselling sessions in order to build trust
- the new Comprehensive Area Assessment via the Audit Commission is introducing the development of Local Area Agreements. Local area teams could be used to engage residents as well as town and parish council links, possibly using the Civil Contingencies Act legislation as a driver
- it is important that realistic expectations established from the outset
- visibility, accessibility and clear communication lines are required when engaging with communities
- communication should be maintained post-implementation (success data)
- community meetings should take place with independent chairs (perhaps through flood forum representatives)
- those unable to attend meetings should be individually consulted through household visits or telephone calls
- awareness could be raised through advertising on local radio and in newsletters and leaflets
- schemes having little or no support from the community should not be pushed through as it will not be sustained
- it will be important to communicate and raise the profile with existing flood related groups in the area, as well as at other local group events i.e. local shows, Woman's Institute, residents associations
- Environment Agency/local authority may need to discuss priorities and agendas with the communities, rather than imposing them, to obtain support and buy-in

- workshops and “flood fairs” should be held on weekends or summer evenings for maximum attendance
- advertising in flood risk areas
- encouraging local participation by holding school events to clear up ditches and watercourses which could also increase awareness and education

3. Should subsidies be offered to everyone living in high-risk homes; to all households in low-income areas; or only to low-income households?

Approximately 70% of the delegates thought offering subsidies to everyone living in high-risk homes in the first instance was the best approach. There was broad consensus that subsidies should be based on risk level rather than income level (which could also be divisive and jeopardise effectiveness of the program).

Responses from delegates included:

- only providing subsidies to low income households could lead to inconsistency. Also, it was questioned why people should be penalised for earning more since flooding would be just as devastating whether rich or poor
- subsidies should be based on risk only, because the house remains at risk whereas families may move on
- means testing for subsidies was likely to be a waste of time and resources
- it might be possible to introduce a sliding scale for offering subsidies to all those living in high-risk homes ie introduce some kind of cap e.g. 100% to £5k and 50% to £8k
- the introduction of surface water management plans will help to identify the high risk homes

4. Given that it would only be possible to subsidise measures for a limited number of areas and properties, the schemes might need to favour households less able to pay for measures themselves. What mechanism(s) could be used to identify these households?

A number of responses indicated there would not be support for this approach for reasons given above (divisive etc). Suggestions provided on implementation included:

- means testing could be adopted, however this may be too bureaucratic and time consuming, as well as potentially discouraging participation (some people may not fully disclose information)
- there maybe potential to use something similar to the Flood and Coastal Defence Project Appraisal Guidance (FCD PAG) guidance on use of Social Deprivation Index (already used by the Government), as it would then be consistent nationally. However, it was noted that indices of deprivation are not necessarily appropriate as they are not properly reflective in sparsely populated rural areas.
- the selection criteria could be based on existing database of income benefit/disability/OAPs etc.
- it might be helpful to focus on households that receive council tax relief.

5. Overall, do you support an approach that promotes local flexibility of spend, or do you prefer a more nationally consistent approach?

Local flexibility of spend	**78.7%**
Nationally consistent approach	**21.3%**

Overall, an approach that offers local flexibility was favoured by delegates, however a significant number of responses suggested that it should be a mixture of both, whereby a national framework, or guidance document is put in place but decisions are ultimately made at a local level.

Other responses to this question of note were:

- the scheme must be conducted under national guidance to concentrate funds on suitable efforts and have uniformity so to avoid “postcode lottery” situation arising
- schemes like this can not be targeted nationally, it must be local and personal to specific areas.
- experience shows that although national schemes often provide higher budgets, one size does not fit all
- regional differences in housing stock should be taken into consideration, together with availability of building materials and capacity of contractors
- there should be a defined method of decision making otherwise trying to explain what criteria is being used will be complicated and difficult to sell.

Other comments raised on the topics covered in Section 3 included:

- there was concern that the consultation may have raised more questions than it did providing solutions. It recognised that there was a large number of challenges to overcome even though the scheme is planned to be implemented in the near future.
- it was suggested that insurers could be encouraged to make contributions towards the anticipated funding for the scheme
- during discussions there was constant mention of the Environment Agency undertaking a significant amount of the work for this scheme, however it was noted that they do not have the resources to do what is expected of them and it was questioned whether further resources and funding should be made available to do this new work?
- It was suggested that adoption of flood warning technologies could be a prerequisite of taking up the flood resilience support subsidy
- It was suggested that funding from Section 106 agreements (Town and Country Planning Act, 1990) from developers could be investigated
- It was noted that there is a need to ensure that flooding is considered in the wider context of resilience under the Civil Contingency Act through the Local Resilience Forum process and “Community Resilience Plans”.

4. APPENDIX A - Delegate lists

Wednesday 15 October 2008

The Hospitium Yorkshire Museum & Gardens, Museum Gardens York

NAME	POSITION	ORGANISATION
Mr Will McBain		Arup
Mr Derek Bell	Flood Resilience Manager	Barnsley Metropolitan Borough
Mr John Batty	Director	Bluejohn Marketing
Mr Mike Powell		Bradford Metropolitan District Council
Mr Alan Davidson		Bradford Metropolitan District Council
Mr Peter Brierley	Building Control Manager	Castle Morpeth Borough Council
Mr Brian Trotter	Area Building Control Officer	Castle Morpeth Borough Council
Mr Steve Keeney	Project Manager	CE Electric UK
Mr Philip Charles	Project Manager	CIRIA
Mr Ben Kidd	Assistant Project Manager	CIRIA
Mr James Cavanagh	Senior Engineer	City of York Council
Mr Michael Collins	Building Control	City of York Council
Mr Geoff Dawson	Building Control Surveyor	City of York Council
Mr Mark Shaw	Watch Manager	Cleveland Fire Brigade
Mr Andy Sullivan	Group Manager	Cleveland Fire Brigade
Mr Tim Bassett	Environmental Protection Manager	Craven District Council
Mr Graham Tarn	Environmental Protection Officer	Craven District Council
Mr Mike Johnson	Principal Technical Policy Officer (Water and Flooding)	DCLG
Mr Neville Britton	Compliance Manager	Defence Estates
Mr John Cope	Compliance Manager	Defence Estates
Mr John Goudie	Engineering Policy Advisor	Defra
Dr Tim Harries	ESRC Placement Fellow	Defra
Mr Pat Hagan	Neighbourhood Manager	Doncaster Council
Ms Rosalind McDonagh	Emergency Planning Officer	Doncaster Council
Mr Matthew Fletcher	Assistant Building Control Surveyor	Doncaster Metropolitan Borough Council
Mr David Henson		Doncaster Metropolitan Borough Council
Mr James Mason	Senior Emergency Planning Officer	East Riding of Yorkshire Council
Ms Amanda Atkinson		Environment Agency
Mrs Claire Brown	Development Control Engineer	Environment Agency
Mr Graham Lindsey	Flood Incident Management Officer	Environment Agency
Ms Sarah McCrea	Flood Incident Management Team Member	Environment Agency
Mr Andrew Newby	Flood Incident Management	Environment Agency
Ms Clare O'Mahoney	Flood Incident Management	Environment Agency
Miss Astrid Paget	Development Control Officer	Environment Agency
Mr Dave Piercy		Environment Agency
Ms Claire Russell		Environment Agency
Ms Emma Skinner	Scientist (Flood Risk Science)	Environment Agency
Miss Gillian Turner	Development Control Engineer	Environment Agency
Mrs Angela Vinand	Flood Incident Management Officer	Environment Agency
Mr Dale Warmandale		Environment Agency
Mr Sam Watson	Development Control Officer	Environment Agency
Ms Danielle Wheatley	Flood Incident Management Team Member	Environment Agency
Mr John Woods	Asset Systems Team Manager	Environment Agency

Wednesday 15 October 2008

The Hospitium Yorkshire Museum & Gardens, Museum Gardens York

NAME	POSITION	ORGANISATION
Mr Mervyn Pettifor	Director	Flood Management Support Services Ltd
Mr James Young	Senior Engineer	Gateshead Council
Ms Britt Warg	Sales Manager	Geodesign Barriers Ltd
Mr Peter McEvoy	Planning Policy Officer	Hartlepool Borough Council
Mr Jason Whitfield	Planning Officer	Hartlepool Borough Council
Mr Andrew Gray	Senior Pricing	HBOS GI
Mr Jason Shirazi	Principal Emergency Planning Officer	Kirklees Metropolitan Borough
Mr Sean Westerby	Emergency Planning Team Leader	Kirklees Metropolitan Borough
Mr David Sellers	Principal Engineer (Land Drainage)	Leeds City Council
Mr Graham Wilson	Head of Env Action & Planning	Leeds City Council
Mr Mark Hodges	Regional Technical Controller	Merlin Claims
Mr Neil Bailey	Architectural Engineer	Michael Dyson Associates Ltd
Ms Anna Hryniewiecka	Architectural	Michael Dyson Associates Ltd
Ms Mary Dhonau	Chief Executive	National Flood Forum
Mr Colin Bulger	Assistant Chief Executive	North East Lincolnshire Council
Mr Jamie Dunn	Policy & Partnerships Manager	North East Lincolnshire Council
Mr Andy Smith	Drainage Engineer	North East Lincolnshire Council
Mr Barrie Onions	Senior Planning Office Spatial Planning	North Lincolnshire County Council
Miss Fiona Stone	Project Officer	North Yorkshire County Council
Mr Brian Hesler	Chief Fire Officer	Northumberland Fire & Res. Service
Mr John Dee	Training Manager	Peter Cox Ltd
Mr John Summers	Property Manager	Ryedale District Council
Mr Steve Pogson	Health& Community Safety Manager	Scarborough Borough Council
Mr Hugh Morris		Survey & Site Services
Mr Carl Bickerdike	Regional UW Manager	Travelers Ins Co Ltd
Ms Jyoti Sapkota	Resilience Planning	Tyne & Wear Emergency Planning
Mr Lee Longley	Trainee Underwriter	UK Underwriting Ltd
Ms Yu Chen		University of Glasgow

Friday 17 October 2008

Manchester United Football Club, Old Trafford, Manchester

NAME	POSITION	ORGANISATION
Mr Ian Laird	Client Officer	Barrow in Furness Borough Council
Mr Terry Longden	Drainage Manger	Blackburn Borough Council
Mr Dave Rothwell	Head of Housing & Environmental Protection Services	Blackpool Borough Council
Mr John Batty	Director	Bluejohn Marketing
Mr Andrew Lodge	Environmental Health Manager	Bradford Metropolitan District Council
Mr Mark Ellis	Regeneration Team Leader	Capita Symonds Ltd
Mr Philip Charles	Project Manager	CIRIA
Mr Ben Kidd	Assistant Project Manager	CIRIA
Mr John Goudie	Engineering Policy Advisor	Defra
Dr Tim Harries	ESRC Placement Fellow	Defra
Mr Derek Cochrane	Director	Derek Cochrane Associates
Mr Phil Jones	FRM Asset Management - Team Member	Environment Agency
Mr Dan Matthews	Technical Specialist	Environment Agency
Mr Raymond Puddephatt	Acting ASM Team Leader	Environment Agency
Mrs Barbara Rumble	Graduate Civil	Environment Agency
Mr EPO Snype		Greater Manchester Police
Mr Paul Fleck	Safety & Emergency Planning Officer	Hyndburn Borough Council
Mr Geoff Baslett		Knowsley Metropolitan Borough
Ms AnneMarie Ness	Corporate Risk Manager	Knowsley Metropolitan Borough Council
Mrs Helen Robinson	Senior Emergency Planning Officer	Lancashire County Council
Mr David Walker	Estate Surveyor	Lancashire County Council
Mr Andrew Howorth		Lancashire County Property Group
Mr Mark Bartlett	Civil Contingencies Officer	Lancaster City Council
Mr Ged McAllister		Lancaster City Council
Mr J Toder	District Building Control Officer	Lancaster City Council
Delyth Jones	Emergency Planning Officer	Liverpool City Council
Mr Stephen Corrigan	Head of Emergency Planning	Liverpool Primary Care Trust
Mr Gordon Stubbs	Civil Contingencies Officer	Manchester City Council
Mr Ian Dixon	Watch Manager	Merseyside Fire & Rescue Service
Mr Andrew Lenwey	Firefighter	Merseyside Fire & Rescue Service
Mr Craig Whitfield	Watch Manager	Merseyside Fire & Rescue Service

Friday 17 October 2008

Manchester United Football Club, Old Trafford, Manchester

NAME	POSITION	ORGANISATION
Mr Shaun Alexander		Merseyside Waste & Disposal
Miss Helen Sudlow	Drainage Technician	Mouchel Ltd
Mr Simon Robb	Senior Property Claims Handler	NIG UK
Mr Stephen Hodgson	Deputy Director	Property Care Association
Mr Glenn Finch	Special Projects Manager	ProTen Services Ltd
Ms Rebecca Kench	Business	ProTen Services Ltd
Mr Samuel Brougham	Architect/Sustainability Consultant	PRP Architects
Mrs Maureen Denham	Claims Handler	RBS
Mr Fola Ogunyoye	Director of Advisory Group	Royal Haskoning
Mr Ian Clark	Principal Engineer	RSK Group Ltd
Mr Michael Gartside	Assistant Engineer	Scott Wilson Ltd
Miss Emma-Jane Ellison	Emergency Planning Officer	Shropshire County Council
Mr Gavin Wong	Principal Engineer	Shropshire County Council
Mr David Hodson	Property Business Advisor	The Co-operative Insurance
Mr Rob Bromley	Emergency Planning Officer	Trafford Metropolitan Borough Council
Mr David Hooley	Emergency Planning Manager	Trafford Metropolitan Borough Council
Mr Paul Kelly	Principal Engineer	Trafford Metropolitan Borough Council
Ms Jeannette Siddall	Mitigation Leas	United Utilities plc
Dr Duncan Thomas	Research Fellow	University of Manchester
Mr Gayan Wedawatta	PhD Student	University of Salford
Mr David Beddoes	Student	University of Wolverhampton
Dr Jessica Lamond		University of Wolverhampton
Dr Elizabeth Young	Hydrologist	URS Corporation Ltd
Mr Martin Grime	Corporate Emergency Planning	Vale Royal Borough Council
Mr Colin Ludden		Warrington Borough Council
Ms Theresa Whitfield	Emergency Planning Manager	Warrington Borough Council
Mr David Bithell	Public Health Services Manager	Wigan Metropolitan Borough Council
Ms Rita Carletti	Project Officer	Wigan Metropolitan Borough Council
Mrs Kate Murcott	Civil Contingencies Officer	Wigan Metropolitan Borough Council
Mr Mark Camborne	Health, Safety & Resilience Manager	Wirral Metropolitan Borough Council
Ms Aimee Conroy	Trainee Emergency Planning Officer	Wirral Metropolitan Borough Council
Mr Carl Green	Principal Engineer	Wyre Borough Council

Thursday 23 October 2008

Novotel Bristol Centre, Victoria Street, Bristol

NAME	POSITION	ORGANISATION
Mr M Quigley	Drainage Engineer	Airey & Coles Consulting Engineers
Mr John Batty	Director	Bluejohn Marketing
Mr Chris Barrow	Flood Defence	Bristol City Council
Ms Lucy Darkin	Sustainable Projects Officer	Bristol City Council
Mr Peter James	Project Manager - Engineering Systems Division	British Board of Agrement
Mr Mike Lake		Capita Symonds Ltd
Mr Andrew Lee	Senior Graduate	Capita Symonds Ltd
Mr Robin Farrington	Project Manager	CIRIA
Mr Ben Kidd	Assistant Project Manager	CIRIA
Mr J Histed		Dauntsey Parish Council Drainage Board
Mr John Goudie	Engineering Policy Advisor	Defra
Dr Tim Harries	ESRC Placement Fellow	Defra
Mr Mike Bird	Chief Engineer (Asset Management)	Devon County Council
Mr Chris Cranston	Operations Manager	Devon County Council
Mr Dominic Maxwell-	Emergency Planning Officer	Devon County Council
Mrs Emma Ferguson	Flood Awareness Campaign Co-ordinator	Environment Agency
Ms Katie Jay	Flood Incident Management Officer	Environment Agency
Mr Paul Lockhart	Flood Risk Programme Manager	Environment Agency
Mr Julian Payne	Planning Liaison Team Leader	Environment Agency
Mr Nick Reed	Flood Incident Management Officer	Environment Agency
Mr Roy Stokes	Regional Flood Defence Operations Engineer	Environment Agency
Mr Gary Tustin	Project Manager	Environment Agency
Mr Andrew Vipond		Environment Agency
Ms Anita Baxter	Director	Floodology Ltd
Mr Malcolm Baxter	Chairman	Floodology Ltd
Mr David Sutton	Environmental Health Manager	Gloucester City Council
Mr Mike Barton	Flood Risk Management Team	Gloucestershire County Council
Mr Stuart Hedgecott	Principal Consultant	Halcrow
Mr Steve Hodges		Herefordshire Council

Thursday 23 October 2008

Novotel Bristol Centre, Victoria Street, Bristol

NAME	POSITION	ORGANISATION
Mr Paul Bond	Senior Consultant	Hilson Moran Partnership
Mr Phil Simcox	Director	Howick Consultants
Mr Andy Tagg	Senior Manager	HR Wallingford Ltd
Mrs Leanne Roach	Senior Hydrologist	Hyder Consulting (UK) Limited
Mrs Millward	Property Technical Underwriting	Lloyds TSB General Insurance
Mr Paul Kemp	Principal Engineer	MWH
Ms Mary Dhonau	Chief Executive	National Flood Forum
Ms Gill Holland		National Flood Forum
Mr Ian Harrison	Strategic Manager - Risk and Resilience	Newark and Sherwood District Council
Miss Jo Sowley	Senior Personal & Equine Underwriter	NFU Mutual
Mr Gary Briscoe	Managing Director	Protectahome Ltd
Mr Stephen Williams	Area Manager	Protectahome Ltd
Mr Keith Davies	Head of Emergency Planning	Rhondda Cynon Taff County Borough Council
Miss Kirsten Chick	Hydrologist	SLR Consulting Ltd
Mr Geoffrey Mackett	Civil Contingencies Officer	Somerset County Council
Ms Pam Harvey		South Somerset District Council
Mr Roger Meecham	Engineer	South Somerset District Council
Ms Ingrid Wellard		The National Trust
Dr Mervyn Bramley	Engineer and Environmentalist	Wessex RFDC
Mrs Tracy Windemer	Civil Engineer	West Devon Borough Council
Mr Patrick Aust	Drainage Engineer	Winchester City Council
Mr Raymond Capewell	Housing Officer	Wyre Forrest District Council
Mr Philip Smith	Watercourse Officer	Wyre Forrest District Council
Mr Philip Bristow	Senior Property Underwriter	Zurich Insurance

Friday 24 October 2008
Defra Innovation Centre, Reading

NAME	POSITION	ORGANISATION
Miss Jessica Stronge	Senior Consultant	Black & Veatch Ltd
Mr John Batty	Director	Bluejohn Marketing
Mr Roger Day	Senior Architect	Calford Seaden Partnership
Mr Robin Herd	Technician	Calford Seaden Partnership
Mr Steve Woolard	Engineering Services	Christchurch Borough Council
Mr Robin Farrington	Project Manager	CIRIA
Mr Ben Kidd	Assistant Project Manager	CIRIA
Mr Stephen Porritt	PhD Research	De Montfort University
Mr John Goudie	Engineering Policy Advisor	Defra
Dr Tim Harries	ESRC Placement Fellow	Defra
Dr Dumashie		Dumashie Ltd
Mrs Nicola Taylor	Director	Eco-Coverage Technologies Ltd
Mr Paul Dawson	Technical Services Officer	Elmbridge Borough Council
Mr Steve Ball	Assistant Director of Engineering	English Partnerships
Mr Owen Peat	Project Manager	English Partnerships
Ms Anya Bednarczyk		Environment Agency
Mr Joss Carter	Project Manager	Environment Agency
Mr Geoffrey Gibbs	Technical Advisor	Environment Agency
Mr Paul Hardy	Flood Incident Management Team Leader	Environment Agency
Mr Keith Lead	Team Leader	Environment Agency
Ms Tina Ogunremi	Asset System Management	Environment Agency
Miss Carly Pannell	Planning Liaison	Environment Agency
Mr Steve Taylor	Flood Forecasting Team Leader	Environment Agency
Mr Ian Tomes	Flood Risk Manager	Environment Agency
Mr Nigel Woonton	Flood Risk Management Project Manager	Environment Agency
Mr Terry Wright		Environment Agency
Miss Sarah Ward	PhD Candidate	Exeter University
Ms S Calver	Project Manager	Fira
Mr Alan Wall		Flood Guards Systems Ltd
Mr Colin Garwood	Director	Flood Risk Management Services
Mr Gavin George	Sales Director	Floodguards International Ltd
Mr Simon Chapman	Household Development Underwriter	Fortis Insurance

Friday 24 October 2008
Defra Innovation Centre, Reading

NAME	POSITION	ORGANISATION
Mr Michael Hassell		Government Office for the South
Mr Geoff Fowler		Guildford Borough Council
Mrs Effie Toliou	Graduate Engineer	Hannah Reed & Associates
Mrs Kirsty Klepacz		Havant Borough Council
Ms Gillian Field	Senior Engineer	Hertfordshire East Council
Mr Martin Brightwell		Horsham District Council
Mr Jonathan Simm	Technical Director - Engineering	HR Wallingford Ltd
Mr Andy Tagg	Senior Manager	HR Wallingford Ltd
Mr Yusef Fiener	Researcher	Loughborough University
Mr Scott Wakely	Technical Officer	Mid Sussex District Council
Ms Mary Dhonau	Chief Executive	National Flood Forum
Mr Ian Harrison	Strategic Manager - Risk and Resilience	Newark and Sherwood District Council
Mr Russell Taylor	Senior Engineer	NHBC
Mr P J Kirkley	Project Engineer	Oxford City Council
Mr Steve Smith	Senior Engineer	Oxford City Council
Mr Phillip Hewitt	Managing Director	Phil Hewitt Associates Ltd
Mrs Natalie Palmer	Policy Planner	Reading Borough Council
Mr Martin Russell-		RICS (Environment Faculty)
Mrs T Trevis		RICS (Environment Faculty)
Mr Alan Cripps	Associate Director, Built Environment	Royal Institute of Chartered Surveyors
Mrs Deborah Walsh	Head of Public Policy & Communications	Royal Institute of Chartered Surveyors
Mr John Godden	Principal Engineer	Runnymede Borough Council
Mr Bava Sathan	Assistant Engineer	Runnymede Borough Council
Miss Eleanor Cole		Scott Wilson Ltd
Miss Helen Judd	Assistant Hydrologist	Scott Wilson Ltd
Mr Neville Hutchinson	Director	Shellform Ltd
Mr Jonathan Garlick	Assistant Technical Officer	Society for the Protection of Ancient Buildings
Mr Paul Simmonds		Swindon Borough Council
Mr Tim Mealing	Regional Architect	The Concrete Centre
Mr Ron Whitehead	Chief Executive	Total Flood Solutions
Mr Martin Horne	Timber Frame Consultant	Trada Technology
Dr Rebecca Sims	Research Associate	University of Lancaster
Mr Alan Allison	Councillor	Valanem Environmental Management
Mr Brian Rodgers	Project & Engineering Services Manager	Wycombe District Council

5. APPENDIX B - Workshop programmes

Wednesday 15 October 2008

The Hospitium Yorkshire Museum & Gardens, Museum Gardens York

9.30	Registration and refreshments
10.00	Chair's introduction *John Batty, Lead Facilitator*
10.10	Overview of household flood resilience and protection measures *Will McBain, Arup*
10.30	Encouraging the take-up of flood resilience and protection - the research evidence *Dr Tim Harries, ESRC Placement Fellow, Flood Management, Defra*
10.45	Introduction to the Defra pilot projects (RF1) and RF2 *John Goudie, Engineering Policy Advisor, Defra Flood Management Division*
11.00	Refreshment break
11.15	Overview of the Defra consultation *John Goudie, Engineering Policy Advisor, Defra Flood Management Division*
11.30	Q & A (for all morning speakers)
11.45	Group break-out session 1
12.30	Group feedback and open discussion
12.45	Lunch
13.45	Defra Pilot project – Dunhill Estate, Leeds *David Sellers, Principal Engineer (Land Drainage), Leeds City Council*
14.00	Overview of two proposed Defra policy options for promotion *John Goudie/Tim Harries, Defra*
14.15	Group break-out session 2
15.00	Group feedback and open discussion
15.15	Stakeholder engagement – case studies on implementation of flood resilience and protection measures *Mary Dhonau, Chief Executive, National Flood Forum*
15.35	Group break-out session 3
16.05	Group feedback and open discussion
16.25	Chair's closing remarks
16.30	Close

Friday 17 October 2008

Manchester United Football Club, Old Trafford, Manchester

9.30	Registration and refreshments
10.00	Chair's introduction *John Batty, Lead Facilitator*
10.10	Overview of household flood resilience and protection measures *Fola Ogunyoye, Royal Haskoning*
10.30	Encouraging the take-up of flood resilience and protection - the research evidence *Dr Tim Harries, ESRC Placement Fellow, Flood Management, Defra*
10.45	Introduction to the Defra pilot projects (RF1) and RF2 *John Goudie, Engineering Policy Advisor, Defra Flood Management Division*
11.00	Refreshment break
11.15	Overview of the Defra consultation *John Goudie, Engineering Policy Advisor, Defra Flood Management Division*
11.30	Q & A (for all morning speakers)
11.45	Group break-out session 1
12.30	Group feedback and open discussion
12.45	Lunch
13.45	Defra Pilot project - Sunderland Point, Morecambe *Ged McAllister, Lancaster City Council*
14.00	Overview of two proposed Defra policy options for promotion *John Goudie/Tim Harries, Defra*
14.15	Group break-out session 2
15.00	Group feedback and open discussion
15.15	Stakeholder engagement – case studies on implementation of flood resilience and protection measures *Tim Harries, Defra*
15.30	Group break-out session 3
16.00	Group feedback and open discussion
16.15	Chair's closing remarks
16.30	Close

Thursday 23 October 2008

Novotel Bristol Centre, Victoria Street, Bristol

9.30	Registration and refreshments
10.00	Chair's introduction *John Batty, Lead Facilitator*
10.10	Overview of household flood resilience and protection measures *Andy Tagg, HR Wallingford*
10.30	Encouraging the take-up of flood resilience and protection - the research evidence *Dr Tim Harries, ESRC Placement Fellow, Flood Management, Defra*
10.45	Introduction to the Defra pilot projects (RF1) and RF2 *John Goudie, Engineering Policy Advisor, Defra Flood Management Division*
11.00	Refreshment break
11.15	Overview of the Defra consultation *John Goudie, Engineering Policy Advisor, Defra Flood Management Division*
11.30	Q & A (for all morning speakers)
11.45	Group break-out session 1
12.30	Group feedback and open discussion
12.45	Lunch
13.45	Defra Pilot project – Bleasby, Nottingham *Ian Harrison, Strategic Manager - Risk and Resilience, Newark and Sherwood District Council*
14.00	Overview of two proposed Defra policy options for promotion *Tim Harries, Defra*
14.15	Group break-out session 2
15.00	Group feedback and open discussion
15.15	Stakeholder engagement – case studies on implementation of flood resilience and protection measures *Mary Dhonau, Chief Executive, National Flood Forum*
15.30	Group break-out session 3
16.00	Group feedback and open discussion
16.15	Chair's closing remarks
16.30	Close

Friday 24 October 2008

Defra Innovation Centre, Reading

9.30	Registration and refreshments
10.00	Chair's introduction *John Batty, Lead Facilitator*
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15.30	Group break-out session 3
16.00	Group feedback and open discussion
16.15	Chair's closing remarks
16.30	Close

6. APPENDIX C - Speaker biographies

John Batty – Managing Director – Bluejohn Marketing Ltd
Prior to establishing Bluejohn Marketing in May 2003, John held senior management positions in the construction and utility sectors. For eight years John was Marketing Director of CAN Ltd, the specialist contractor which installed the fabric roof on the Millennium Dome and the 'spokes' on the BA London Eye. John subsequently looked after group marketing at Fusion Provida, the manufacturer and distributor of products and services for utility infrastructure projects.

In June 2008, John chaired a series of six seminars on PPS25, the planning guide relating to building development and flood risk organised by Royal Haskoning on behalf of Defra. John has also acted as chair and facilitator at events organised by the WRc, Environment Agency and other organisations.

Bluejohn Marketing undertakes business development, market research and copywriting for organisations such as the SBWWI, utility contractors and product manufacturers. Full details can be accessed at www.bluejohnmarketing.com.

Will McBain
Associate, Arup
Will.mcbain@arup.com

Will McBain has thirteen year's experience of flood risk management in the UK and overseas. He is Arup's Framework Manager for the National Engineering and Environmental Consultancy Agreement (NEECA2) Framework with the Environment Agency. He was Project Manager and Lead Editor for Arup's contract with CIRIA to prepare the Living Draft Practice Guide Companion to PPS25 for the Department for Communities and Local Government. Based in Arup's Leeds Office, and a resident of York for ten years, Will brings a local perspective to this debate on property flood protection and resilience.

Fola Ogunyoye
Director of Advisory Group, Royal Haskoning
f.ogunyoye@royalhaskoning.com

Fola is a Chartered Civil Engineer with nearly 20 years experience at the water's edge, managing water or reducing the risk of damage from it. Over this period, he has been a contractor, operations manager, consultant and researcher. This unique blend of experience has allowed him to develop innovative, yet pragmatic approach to flood risk management. His particular interests include the appropriate use of novel techniques to achieve sustainable management of flood and coastal erosion risk such as SUDs, flood protection and resilience, including developing best practice guidance for them.

Fola is currently involved in developing/updating of best practice guidance for fluvial design, flood protection products, culvert design and operation, and flood embankments performance.

Andy Tagg
Senior Manager, HR Wallingford Ltd
aft@hrwallingford.co.uk

Andy is a chartered civil engineer with over 25 years' professional experience with HR Wallingford and Thames Water. He has worked on most aspects of the water environment, including water resources, flooding and water quality. His career at Wallingford started in 1982, when he was involved in developing and using computational river models. Since returning to HRW in 2003 he has worked on several strategic projects, including the production of a screening tool for urban diffuse pollution in Scotland and N.I., and the development of a catchment planning system for degraded urban catchments (the SMURF project). He also managed a research project at HRW, for DCLG and the Environment Agency, producing new insights into flood resilience construction. New guidance was published on this in May 2007 by DCLG and Andy is one of the three principal authors. For the past two years he has been the project manager for the FLOODsite project – the largest flooding research project yet commissioned by the EU.

Andy has been an active member of CIWEM for many years, and was Central Southern Branch Chairman from 2005 to 2007. On the 1st September he was appointed Manager of the Flood Management group at HRW, with responsibility for 19 professionals involved in all aspects of flood risk management.

Dr Tim Harries
Independent consultant – public responses to environmental risks
timharries2002@yahoo.co.uk

Tim is a social researcher whose area of expertise lies in understanding the motivations behind householders' responses to environmental hazards such as flood risk.

Currently working for Defra as an independent consultant, Tim was one of the team responsible for writing the consultation document on promoting household flood resilience and protection. He has worked as a Research Fellow at the Flood Hazard Research Centre, Middlesex University, and as an Economic & Social Research Council Research Fellow at Defra Flood Management Division.

John Goudie
Engineering Policy Advisor. Defra Flood Management Division
John.R.Goudie@defra.gsi.gov.uk

John joined the Flood and Coastal Defence Division of MAFF in 1990 after some 20 years in the private sector, working both in the UK and for some years overseas. In the latter years of that period the focus was on water-related projects, mainly irrigation and hydropower.

Since 1990, his workload has included the development of information systems to collect flood and coastal defence information from the operating authorities, the procurement and supervision of R&D related to flood and coastal defence, and participation in the development of the MAFF Project Appraisal Guidance series. A period working out of the Lincoln Regional Office on the appraisal of grant aid applications for flood and coastal defence schemes, from early discussions to scheme approval, gave him an insight into the work of the Regional Offices. At this time MAFF became Defra, with the addition of environmental policy responsibilities.

His current workload includes risk-related R&D, the development of risk mapping (including the underpinning data issues), the European CRUE ERA-Net, and projects in the 'Making Space for Water' Adaptation and Resilience Programme – specifically the projects associated with increasing the uptake of protection and resilience of properties.

David Sellers
Principal Engineer (Land Drainage), Leeds City Council
david.sellers@leeds.gov.uk

David Sellers is a chartered civil engineer. He is currently responsible for Leeds City Council's Land Drainage Section and has worked on the appraisal, design and construction of drainage schemes for more than thirty years. He was the project manager of DEFRA's West Garforth Integrated Urban Drainage (IUD) pilot project, as well as the Dunhill estate pilot project. He is the author of a history of sewerage in Leeds (Hidden Beneath Our Feet, 1997) and, more recently, books on the history of astronomy.

Ian Harrison
Strategic Manager for Risk and Resilience. Newark and Sherwood District Council
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With some 30 years service in Local Government Ian has significant experience in managing risks to the community and in particular engaging with and supporting flood risk areas and residents. Since the summer floods of 2007 when 72 parishes of the 81 in Newark and Sherwood District Council area were severely affected with flash flooding, Ian has been a key driver locally and regionally for building the resilience of communities to flooding. He is particularly keen that local government is a catalyst to resilience being developed and extended nationally to assist communities to mitigate the impact of all manmade and natural disasters that may, and indeed will, occur in the future.

Ged McAllister BSc., C.Eng., MICE
Engineering Manager, Lancaster City Council
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Ged joined Lancaster City Council in late 1983 to work on the reclamation of Derelict Land Team carrying out varying types of reclamation and development schemes. These include demolition factories and a power station; building new roads; pollution remediation; and the design and construction of an all weather sports pitch and athletics track.

In the late 1980's started work on Morecambe Coastal Works and since then have been responsible for the seven completed breakwater and rock armour and beach nourishment coastal defence schemes along the Morecambe frontage. The last stage was completed in 2007.

During breaks in the coastal works program worked on the redevelopment of Morecambe included the construction of the new roads, diversion of a railway, and demolition of various redundant buildings including a cinema and a dolphinarium. With the development of the Tern Arts Project which was integrated with Phases 4 & 5 of the Morecambe Coastal Works became the engineer on the Tern team which included artists; graphic designers; planners and landscape architects. Claim to fame - erection of the Eric Morecambe statue.

New role as engineering manager covers a large range of subjects including capital schemes, Cycling Demonstration Town, coastal maintenance and monitoring, land drainage and Christmas Lights. Trustee of the Morecambe Bay Partnership.

Mary Dhonau
Chief Executive, National Flood Forum
mary.dhonau@floodforum.org.uk

Mary Dhonau is the chief executive of the National Flood Forum which is a registered charity run by people who have experienced the trauma, loss and frustration that goes with flooding. The National Flood Forum provides support to communities and individuals that have been flooded, or are at risk of flooding. It is a collective, authoritative voice that aims to influence central and local government and all agencies that manage flood risk.

Mary travels around the country helping those who have been, or are at risk of flooding to form community groups that work with rather than against those who manage flood risk in their areas.

Mary has made many appearances on national TV and radio representing the 'flooded community' and through TV has been able to promote 'flood awareness' and 'self help' She has been a studio guest amongst others on BBC Breakfast News, GMTV, ITV's 'This Morning' News night and even the 'Richard and Judy Show'(!)

Mary is responsible for organising the biannual NFF national conference~ a unique event which gives an equal platform to those who manage flood risk and those who are at risk of flooding she is also editor of the quarterly NFF newsletter. Mary is a regular speaker at flood risk conferences and promotes the use of 'flood resistance and flood resilience'. Mary was the driving force behind the much acclaimed 'blue pages'~ a directory of flood protection products and services.