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floodforum.net



Overview: Floodforum.net



Introduction

Floodforum.net was launched on Monday 21 January and ran online for one month until Sunday 17 February 2002.

The aim of the forum was to bring together people involved in and affected by inland flooding into one space to stimulate discussion of the causes, consequences and communication issues associated with inland flooding in the UK, to inform Parliamentary debate.

532 individuals registered and logged in to the discussion. Participants included representatives of the Department for Environment, Food and Rural Affairs, the Environment Agency, insurance industry, emergency planning association and many other professional bodies but the majority of the participants were those who live in high flood risk areas and have personal experience of flooding. Floodforum.net was publicised through direct mailings, local media coverage, viral emails, web links and word of mouth.

The discussion is archived in full at www.floodforum.net.

The extracts in *italics* have been taken directly from the messages posted in the consultation. This report is not presented as a representative view of the population but as a representation of the experiences and expertise of a group of individuals for whom flood management and flood protection are of direct relevance.

"I don't know the mechanics of hosting a site like this, but would it be feasible to run this flood forum on a regular basis, or produce a permanent bulletin board with set headings. There seem to be comments from people involved in every aspect of flooding. As lack of communication between the different affected parties seems to be the biggest problem, a forum like this, regulated to keep a constant flow of dialogue would be incredibly useful to everybody. For example, I work for the Environment Agency, but I am not a landowner, or a councillor, or a flooded homeowner or a climate change research scientist or a developer. We can all learn a lot from each other and maybe break down some barriers, making all of our work easier and more effective."

Contribution from Participant



Participation Profile

Usability Information

532 individuals registered and logged in to the password protected discussion area of www.Floodforum.net. **157** participants posted a total of **571** messages. There were **89,305** successful hits and a total of **4335** user session for the entire site for the consultation period.

The most popular day of the week to visit the site was **Wednesday** and the least popular was **Sunday**. The most active hour of the day was **14:00-14:59**, the latest active was **03:00-03:59**.

Analysis of Floodforum.net Exit Survey

A survey was emailed to all registered users of Floodforum.net. As of March 19th 104 people had responded, a response rate of 20%. The following information is based on their responses.

Population Profile of Floodforum.net participants

- ~~///~~ 69.2% men
- ~~///~~ 86.5% aged 21-65 (51-65 most common range 36.5%)
- ~~///~~ 94.2% live in houses of various varieties (36.5 % detached house)
- ~~///~~ 8.7 % are members of political parties
- ~~///~~ 44.2% have previously been in touch with their MPs
- ~~///~~ 85.6 % voted in the 2001 UK election
- ~~///~~ 80.8% use the internet daily
- ~~///~~ 65.4% have direct experience of the flooding

floodforum.net



Summary of Contributions



1. Causes of Flooding

Participants discussed the many different factors that they perceived to cause flooding in their areas including natural weather patterns, building on floodplains, poor flood management, and lack of expertise:

"Firstly the nature of the rainfall. Secondly, a major factor is the geography of the area. Then there are the human influences." Jim Kent

"The main causes of flooding are complex mixture of factors in my opinion Natural World Climate Change aggravated by House Warming effects that human activity generate, are the starting point of a chain reaction that leads to more extreme and severe weather conditions." Fernando and Val Serra

"Heavy rainfall/storm and/or snow melt. Run-off from developed areas and roads. Improved flood protection upstream. Impediment to flow (from blocked culverts to major development in the floodplain)." Jeremy Chamberlayne

"An over simplistic answer to this question is money, or lack of it to be precise. As is symptomatic of this country, under investment and lack of foresight has created a problem that is now continually reoccurring even when rainfall is of average quantity. An analogy with the rail system could be drawn in that the network was and still is designed for 19th century usage. Rivers and watercourses appear to have altered little in relationship to the increased development and changes in farming practices over the last 100 years. Where has the £51m additional money spoken by Mr A Blair in October 2000 gone?" Andrew Fish

"The only real cause of flooding is that buildings are being constructed within floodplains when they shouldn't be." Dave Hughes

"In many cases the flooding has resulted by outrageous developments built on natural flood plains." Mike Bailey

"..housing in or adjacent to floodplain. No increase in capacity of ditches and smaller rivers to take increased surface water from housing and industrial estates..." Graham Shepard

"I think one has to look at the fact of where roads have been built without thought for what might happen in the event of the non stop rain. At the end of



*“Lack of regular cleaning out and control of vegetation to all watercourses and farmland/roadside ditches. Additional new building has increased the rapid run-off into main sewers and watercourses, and likewise effecting culverts and bridges.”
Ian Peaty*

From this selection of questions, it can be seen that the Floodforum.net participants' views on the causes of flooding can be categorised as follows:

- Development leading to increase of water run-off
 - ?? Building on floodplains
 - ?? Run-off from developed areas and roads
 - ?? Elimination of hedges and ditches
 - ?? Poor planning decisions
 - ?? Inadequate funding

- Impediment to flow
 - ?? Lack of various maintenance works to maintain capacity, i.e. regular dredging, clearing watercourses, blocked culverts etc.
 - ?? Filling of the floodplain for agricultural purposes

- Failure to take a whole catchment approach
 - ?? Improved flood protection upstream

- Lack of expertise
 - ?? Lack of general and local engineering knowledge
 - ?? Insufficient number of qualified engineers to work on flood protection

- Absence of flood defence schemes

- Natural weather events and climate change

1.1 Climate change and flooding

Some participants felt that climate change should be taken into consideration by adopting the precautionary principle in managing flooding:

*“What should be done about climate change? Prevention is better than cure, so take a very precautionary approach to development in flood risk areas:
make sure that flood risk assessments are carried out in all potential flood risk*



"...there are no signs that the government is adopting the precautionary principle when it comes to planning issues relating to flood hazard areas. the first draft of PPG 25 certainly talked about the precautionary principle, but the property developers' lobby is too strong and it was soon replaced with the "Sequential Principle", borrowed from the Seveso Directive and modified, to say that it is ok to build in a floodplain if there is no other suitable land in the area.

The government are still insisting on targets for planners who have to allow additional new homes in the south east. In areas like Arundel, there is little land left except prime agricultural, conservation areas, coastal lowlands and floodplains. In such areas, the precautionary principle cannot be applied if government targets are to be met." David Crichton

1.2 Catchment approach

While concerned over their own local needs, many participants of the Floodforum.net agreed that local solutions should be viewed against a more strategic approach to the flood alleviation:

"It appears to me that flood alleviation schemes are planned piecemeal in local areas rather than looking at, for instance, the whole length of a river, with the result that one man's flood defence is another man's dam." Mrs P Whitfield

" Flooding cannot be fully dealt with unless the whole catchment is checked continuously for changes to the hazards and risks." Jim Kent

"As is said in other parts of this debate - one person's flood defences become another person's problems. Whereas drainage accompanying the development in the Overmonnow area may have contributed to the keeping dry of areas having been alerted to flood, please consider that the Monnow flows into the Wye. The trauma of the last two years of inhabitants of Redbrook Road is only now coming to light! People have been flooded out across the road from the Wye and others trapped in their homes!" Angela Hoyle

"It should be planned as a whole for a river catchment area. Improving water flow upstream in isolation may help people there but worsen matters for those downstream." Dr DH Shepard

"Instead of endless finger pointing and blame finding, why don't all of those parties responsible for drainage and watercourses, work together to provide continuity over whole river catchments and help alleviate the effect of flooding for everybody." Anonymous



"In our rural area one of the major influences of flooding is that of 'big field farming'. The removal of hedges, trees and improved land drainage as well as fields left without crops during winter periods are amongst (in our opinion) factors that decrease interception of overland flow and through flow. Improving ditches as suggested by a number of replies in some ways alleviates the problem in that particular area, but 'pushes' it downstream to somebody else." Peter Beales

"In my area flooding is closed by water brought downstream in the Ricer Severn from other counties and the inadequate maintenance of the riverbank and defences, which cannot cope with the volume." R.E. Clark

"We believe in our area the main causes are: - Lack of land management by local farmers and riparian owners..." Barry Powell

"Much flooding in rural areas of North Yorkshire in Autumn 2000 occurred from poorly-maintained riparian-owned watercourses." Paul Underwood

"The main problem in Yoxall relates to the difficulties of large volumes of water failing to pass under an old road bridge in the village. This forces the water back into the village." Len Bettam

"..in this immediate area, it is felt that commercial development and the over-landfilling of the Severn Floodplain are the main causes." E.J. Williams

"In the flooding last October, the Environment Agency insist that the sole cause was the amount of rainfall.. It is opinion of local people that such was the surge of water that a sluice was not properly opened until too late it was this rather than the volume of water." BW Ryder

"...the main source of flooding in our houses was not water overflowing the riverbanks but a mixture of surface/foul water from Anglian Water's drains which came, via manholes and household drains, in through the back of the houses." Sheila Von Rimscha

"The plain fact is that our drainage system is over 100 years old and was built at a time when washing machines, indoor plumbing and dishwashers were unheard of. We are living in the 21st century with 19th century drains! Central Government MUST step in with financing where there are simple solutions. There are many, many areas where the problems are not so easily solved - surely it makes sense to deal with the simple ones and get at least some of us off the hook?" Victoria Heywood



2. Planning and Design of Flood Alleviation Schemes

Participants' responses fall into six categories:

- ?? Failures of the technical planning system - for example, delays, inadequate funding, inefficient grant application processes, and inadequate staff resources.
- ?? Inadequate time-scales for planning – i.e. lack of long-term planning
- ?? Failures of the local planning system - for example, lack of qualifications of local councillors, ignoring planning guidance, and lack of accountability of local planning authorities for the consequences of their decisions
- ?? Ignoring local voices
- ?? Failure by developers to fund flood defences
- ?? Lack of attention on what can be done with existing buildings

"Generally well, but inadequately funded and seriously delayed." Jeremy Chamberlayne

"Flood Alleviation Planning seems reactive rather than proactive. With new housing estates Environment Agency gives advice at initial planning stage and then no more input. i.e. density can double but no further input from EA." Graham Shepard

"The Environment Agency's ways are very wasteful, money wasted on pre-feasibility studies to see if feasibility studies are worth doing, then tell us we fall outside the cost/benefit analysis." F.S. Armishaw

"We have on several occasions made representation to the Planners about the increased risk of flooding to the houses in the main street of the village, and this appears to have been ignored...It doesn't appear to be a government issue unless an election is looming." Barry Powell

"In 2000 that there were insufficient staff or resources to cope with the events of October/November/December 2000. These resources should be in place and concentrated on both new projects AND proper maintenance of waterways with known flooding issues." Jim B Somerset

"New development in a flood plain does NOT, of itself, significantly increase the flood risk to the pre existing flood plain. When the EA and DETR mandarins guide us by saying "development in flood plain increases risk", what they are not explaining is that they are referring only to a total risk that would now have one



make informed judgements. In the 6 months to April 2000 the Environment Agency objected to 190 UK planning applications that would increase flood risk, 83 of these applications were approved ignoring EA advice." Diane Charlton

"It should be noted that this is not a problem in Scotland, thanks to Flood Appraisal Groups, established under the 1995 Scottish Planning Guidelines. These groups have had a major influence on local planners in Scotland, and so far as I know, where a flood appraisal group exists (ie 84% of the population) there have been no subsequent developments allowed against SEPA advice. By contrast, the number in England and Wales allowed against EA advice doubled between 1996 and 2000, amounting to thousand of new homes in hazardous areas. The new PPG 25 makes specific provision to allow new housing in flood hazard areas in England if other suitable land is not available." David Crichton

"I really think that as a whole, all aspects of building roads, barriers or whatever should be really be studied in depth, and also what will happen if the barrier can no longer hold the water back. This is called long term planning which seems to me an essential part of any exercise. You do not save money by cutting corners on cost. But then if the residents are the ones to suffer and not the government then I suppose to them it is cost effective." Jane Pyne

"Development on flood plains is a matter that relates to new building. There is need as well for attention to existing buildings, on flood plains and elsewhere. There is much that could and should be done in the context of flood risk management by individual property owners. However, where there have been initiatives shown by some property owners to modify their premises on account of flood risk, there appear to have been inconsistencies in advice for refusal of planning permission given by The Environment Agency to some local government planning authorities, in the context of planning applications by individual property owners." James Lewis

"The public should also be concerned about Stephen Byers' new Green Paper on planning, which seems to be proposing to give planners even more power to ignore the opinions of interested parties for the sake of expediency - presumably this "developers' charter" will be welcomed by the building industry until they realise that they won't be able to sell houses in floodplains either." David Crichton

"I would suggest that if Planners etc (not forgetting Local Councils) follow the guidelines and take the avenues of advice outlined in PPG25 then the chances of future flooding of new developments would be greatly reduced. Unfortunately PPG25, as its name implies, is primarily a guidance document and consequently those who choose to do so will ignore it, and property owners will continue to lose



3. Engineering Approaches to Flood Alleviation

Participants discussed the possible flood alleviation technologies including constructed defences such as barriers, storage reservoirs, green belts and retention ponds as well as approaches aimed at enhancing the natural capacity of watercourses by its maintenance through regular dredging and clearing.

3.1 Constructed defences

“Moveable Weirs: Raising the weirs during floods would stop the rivers use as a highway for boat based flood responders. Many may not know that a weir which is an obstacle normally to boat operations, actually ceases to be a hindrance when it has a few feet of water over it. Ask the bargees of old.” Ray Cullis

“Green belts and retention ponds: Retention ponds that are added to the existing bayous help to alleviate a rush of water being pushed downstream, they act as a buffer. In addition to the widening of flood control channels and keeping them clean this seems to help.” Ron Crawford

“Indeed the use of balancing ponds is common in the US. Unfortunately the UK has far less land and so the political pressure is there to maximize all spare land for housing and not for ponds.” Jon Clark

“...there can be difficulties over the land take of them [green belts and retention ponds] . However, if developers know well enough in advance that there is a need, they can plan the cost into their land value calculations and work accordingly.” Matthew Kean

3.2 Barriers

“The river bed needs to be much deeper and the river banks raised and reinforced. Whereas closing the gap for emergency vehicles may have some short-term effect, the increasing volume of water each time flooding occurs will render any short term exercise of futile long-term effect.” Angela Hoyle

“There is a lot of talk of fixed flood defences causing problems further downstream. The problem with such defences is that when they fail, the problems within the protected area are magnified, ie faster, more destructive water, rapid rise in water levels etc.” Ray Cullis

“And in any case the flood barrier at Bewdley is probably just a waste of time and



3.3 Reservoirs

"Starting point for a study is to recognise that many river channels are neither broad enough nor deep enough to pass all the flood flows that occur every year. Money should be spent on the best preventative measures and in many cases, this is to let flood water find its own level through water storage. The emphasis should be on the construction of reservoirs and other holding means, based at the nearest point at which the river flows begin to exceed the capacity of the river to hold its normal supply of water. Thus flood waters held in this way by reservoir could then be released and run off as river levels drop and normal channels can hold it. In some cases and with some rivers it may need a combination of tidal barrages and estuaries as well as storage reservoirs" J. Callghn

"A reservoir usually only has an influence for a short distance downstream, and then the effect of other tributaries joining the river, and a larger amount of the catchment contributing to flow, dilutes the storage effect of the reservoir. Some reservoirs, such as Clywedog in the headwaters of the River Severn, are managed to provide storage at times of flooding, but this only has a significant influence for a limited distance downstream, being negligible by the time the English/Welsh border is reached. To be effective, such reservoirs would be required on all tributaries." Anonymous

"A possible solution (although there are obvious practicalities) is to decrease big fields. Other solutions include creating temporary storage lakes to hold flood waters until levels have receded. (flooding fields etc) The storage idea is a solution that is currently being discussed between ourselves, the Environment Agency and the local council. This will decrease the flooding problem for local residents and residents downstream of our village." Peter Beales

"I think that an important priority would be to recognise that structural flood defences are not a panacea. As shown on this forum, many other solutions exist for long-term flood management. Structural defences should not and cannot be eliminated entirely. When appropriate, they must be adequately funded, constructed and maintained, but they should never be our first or only approach. Determining when they are "appropriate" is the challenge, but moving away from the engineering bias towards the structural "solution" would help in reducing vulnerability and in stopping the misery which results from flooding." Ilan Kelman

3.4 Maintenance of watercourses

"Maintenance has been reduced over the decades as a cost-saving exercise and for environmental reasons. Rarely has there been any detailed justification for



these systems to be reviewed and enforcement put in place for systems whose efficiency depend on high levels of maintenance.” Fola Ogunyoye

“Dredging is often suggested as a simple solution to large river flooding. However, dredging would have big implications for towns such as Shrewsbury and Bewdley and the wider riverside environment. If dredging were to be carried out bridges and other riverside structures would need to be reconstructed. Foundations would need to be placed at a depth where the deepened river channel would not cause undercutting. Costs would be substantial and would mean the demolition of a large number of historic structures that contribute to the character of River Severn cities and towns. Ecological and erosion arguments are also not in favour of this option. Constant maintenance through continual and disruptive dredging would also affect the aesthetics of the river which would flow low in a gorge like channel during the summer.” Richard Cross

3.5 Sustainable drainage systems

“.. we need to consider non structural measures. One problem is that the way we fund flood management will inevitably produce short term solutions, - concrete is quicker than trees. We need a longer term, more sustainable approach. On the point of agricultural drainage, why not bring back the drainage grants for farmers, to encourage them to resume maintenance? For other drainage, why not consider legislation to impose a statutory duty on local councils to maintain all watercourses in their areas, issue regular public reports on all flood events and what steps they have taken to prevent a recurrence, - and make them legally liable for failure to carry out these duties?” David Crichton

“For dealing with surface water from sites, in general we promote the use of Sustainable Drainage Systems (SuDS) rather than enlarging rivers. Essentially this involves temporarily containing the surface water by some method (e.g. a balancing pond), so the discharge to any receiving river or stream is then made at a controlled rate to avoid worsening flooding problems. By controlling the surface water at source, this then avoids the need for heavily engineering rivers to be able to cope with the consequences of development, which as shown above, is not always viable.” Matthew Kean

“SUDS are a brilliant concept for reducing flooding in downstream rivers and sewers, however the problem that still has to be resolved is long term maintenance. Where SUDS are left in private ownership, e.g. private parking areas with permeable surface. You will never educate the public to think about drainage. How do you guarantee the long term maintenance, and efficiency, of SUDS systems.” Peter Russell



river flow. Water companies love SUDS because it reduces the increase in loads on their overworked drains, but maintenance is a potential problem which has often been overlooked." David Crichton

"Drainage grants for farmland" may in fact back-fire. Efficient land drains and ditches cause water to flow off farmland too fast, thus overloading streams and rivers. Apart from the environmental damage caused by land drainage, whether granted or not, it has clearly exacerbated flooding. If there are grants available, they should be used to increase the water-retaining capacity of farmland (and conserve biodiversity), not reduce it." Frank Fay

4. Effects of Flooding

In the course of the discussion the participants stressed that the main victims of flooding were householders. Participants expressed their concerns about the misery and hardship people experience during flooding, and in many cases, the adverse effects take weeks and even months to overcome. They pointed out that consequences could encompass financial losses and personal trauma:

"Floods affect an individual in many ways. There is the physical damage - to property, but there are also the intangible effects and losses that the person has to cope with in the aftermath. The loss of the concept of 'home', loss of personal irreplaceable items such as photos or videos, the loss of security and safety or of community (especially when temporary relocation is the only option available) and the loss of self. Recovery is not just about buying new furniture, it is about restoring the sense of identity, security and meaning...these things take much longer to repair and in some cases are never fully sorted." Sarah Quinn

"As an experienced engineering company we turned our skills to defending properties from the affects (sic) of flooding 10 years ago. One of the things that struck us most was the scale of personal trauma involved from the affects (sic) of flooding and in getting people to decide to pay themselves to resolve the situation and protect their property. It was not just the loss of irreplaceable possessions, quite often of little value, nevertheless still family heirlooms, nor the upheaval, having to move out, insurance problems, equity loss, builders quoting for remedial work and then not turning up, arguments with who was to blame, i.e local authorities etc.. " Hugh A Williams.

"Damage and loss of personal items and the long inconveniences awaiting re-instatement is incalculable. Flood victims suffer varying degrees of trauma and shock, and then anger, caused by the slow progress of any action by authorities



"There is no way it is possible to describe the effects of this on a family. We lost photographs, a collection of postcards etc, and most of our furniture..." Sandra Francis

- 1. My eldest daughter in particular was strongly affected by it. Having to live in a rented house, sharing a bedroom with her sister and having much less space all took their toll. Most of their things had to go into storage and she was quite miserable and grumpy. We were in a rented house for 7 months*
- 2. The waiting for some work to start was very stressful. The house was empty for almost 5 months before any remedial work started*
- 3. The difficulty in trying to carry on as normal. we had to take the girls to and from school by car (they hated it) we missed our friends and neighbours.*

"and now? 14 months after the November 2000 floods here in York we have a refurbished house, and no flood defences at all for our part of the river. It could happen again next week..." Neil Rogers

"We had to move out as the insurance company said it was contamination. The whole guts of my house was removed (kitchen, skirting and bathroom) we moved back in June of last year. We had to live on takeaways for 6 months, as I only had buildings cover and not contents, my kitchen was completed New Years Eve 2001. Apart from the stress, I can't believe we are still waiting for confirmation about who is responsible for our drains, so work can start to resolve the problem that caused all of this. We live in fear of it happening again." Julie Heather

" The 2000 flood was the worst, but after 15 months of camping upstairs, living with builders, and making a £30,000+ insurance claim, we are getting back to normal." Cherry Bradshaw

"..a neighbour was at hand to help move some personal items, but like most people all of our White goods, Brown goods and carpets were lost." Lloyd Mortlock

"The ground floor of the mill has been flooded several times in recent years. All the tenants who have experienced that felt they could not return after the clean-up. Worst is the filth and silt; damage to furniture, belongings. We thought we had hacked that by putting possessions onto a table or bed, but the Oct 2000 flood topped the table and bed. The flood has devastating effect on structure, the electric and toilet system. The rubbish, silt and sewerage affects the area around property as well." M. Hucker



"In Yorkshire residents who owned businesses in one town talked about how they had to not only deal with their own damages and aftermath, but also were expected to continue providing a reasonable level of service to everyone else. This became problematic and a source of conflict when these services weren't provided. So not only did these residents have to try and cope with their own problems but also of those generated by other residents. Interestingly there seems to be a 'hierarchy of affectedness' - who was worst off? Those who were directly affected over those who were merely inconvenienced. Those who suffered damage to business and personal property over those who only experienced loss at one place. A 'Them and Us' scenario..." Sarah Quinn

"The local health service in a community post after last years flooding had been evacuated to other community offices. The water damage was so severe that they never returned to the site." Steve Brown

"It [flooding] can give rise to contamination and infection - also the various consequences of stress. Mainly traffic disruption, e.g. A417 at Maisemore, giving rise to long and inappropriate diversions and damage to minor roads. Flooding of property, especially when it occurs on a large scale, e.g. York and Worcester." Jeremy Chamberlayne

Ultimately, the huge cost incurred has to be passed on and people do not seem to appreciate (yet!) that although they might not have been affected directly by the flooding and perhaps they think they have just suffered minor inconveniences with problems in services like public transport or difficulty using their cars at times, the truth is that they will also have to pay, probably through their insurance premiums and direct or indirect taxation, to share in the cost, even if they did not get flooded themselves! Fernando and Val Serra

4.3 Effects of flooding on the health and well-being of those affected

When discussing health effects three particular hazards were identified:

- ?? Dangers from fast flowing waters
- ?? Contamination from pathogens
- ?? Long-term health effect of mould

In addition, it was felt that public might not be aware of potential health threats caused by flooding. Some participants thought that in some cases local authorities were incompetent and ignorant to the health hazards:



inflamed: the scar is still there. There was no obvious sewage in the flood water with which we were inundated, but it was obviously contaminated in some way. Our next-door neighbours had to have all the plaster torn off the walls downstairs, and were out of the house for three months. A bedridden old lady a few doors away had to be taken to hospital in a Land Rover as she slept downstairs." Victoria Heywood

"My company undertook ATP testing for biological loading in clients homes (The results indicated substantial biological loading & considering local drains & sewers were overloaded & flooded the assumption that gross contamination & a potential health threat existed to (my work force) we wore personal protective equipment (PPE). When the local authority drops helpful hints like "Use proprietary deodorisers" I wonder just who can blame the public for complacency." Jeff Charlton

"I am afraid the public are unaware of the huge potential health threats posed by mould in the UK but which is now undergoing substantial legislative action see New York Guidelines on mould remediation. The people of the UK are unfortunately exposed to incompetence & perhaps fraud." Jeff Charlton

4.4 Priorities when dealing with the effects of flooding

Participants identified the following priorities:

- ?? Providing adequate technical guidance on restoration
- ?? Dealing with health and safety of people affected
- ?? Providing appropriate financial mechanisms
- ?? Raising public awareness
- ?? Putting in place personal and community based contingency plans
- ?? Taking community based actions
- ?? Establish a central control agency
- ?? Taking account of local knowledge in planning of flood alleviation

" I wonder what the group thoughts are on the technical approach of flood restoration. Some time ago I reviewed the BRE 4 document advice sheets on how to remediate flood affected homes, they are total nonsense & a potential liability if followed, when I challenged them about the publication they responded by informing me that the author had retired. This incredible advice from an organisation that is respected & followed by surveyors makes a complete nonsense competent restoration." Jeff Charlton



lives, safe evacuation, assistance to the communities at the time. A first class service for those who after all pay the money in." Ray Cullis

" Whilst no one can compensate for distress and misery, some things would help:

- 1. Insurance. Not everyone has it, and those who claim face premium loading, increased excesses or refusal of renewal. This is pretty tough, given its not the house-holder's negligence that has caused the damage.*
- 2. Where local land owners have caused the damage, through failure to maintain ditches, drains etc, they should be made to bear the cost.*
- 3. Likewise, local authorities who no longer maintain ditches, culverts etc for which they are responsible, should shoulder their share of the cost.*
- 4. We've spent loads of hard earned money on flood defences; some lessening of VAT would have been welcome." Cherry Bradshaw*

"There are practical things that can be done to reduce vulnerability. e.g. by raising public awareness - with an education programme for those in vulnerable areas & to have better planning both on an individual and local government level to cope when such floods (and other similar events) occur." Ursula Myers

"We believe that the way forward is to encourage those affected by flooding to form themselves into groups, so that they have the strength to negotiate with the agencies concerned. We would then like to form those community groups into a nationwide network, to exchange information and offer mutual support." Gillian Holland

"All communities and countries need to develop plans of action for any contingency in an emergency, including flood rescue. This plan needs to include all agencies which will need to work together starting to serve together on an inter-agency task force, working out pre-deployment plans, identifying potential rescue sites and scenarios, training together to a common standard, creating strategies for search efforts if someone disappears, and strategies for recovery efforts if someone perishes." Nancy Rigg

"... What is lacking is a standard form of service of the highest quality, for all areas and everybody. From what others have said in this forum, the whole aspect of flooding needs a central control system that oversees all aspects and more importantly the fair spread of money and resources throughout the country. However, even more money, when not much is being spent in the first place, is not a lot of money. It is about time we, as a country, got to grips with this problem in all its facets." Ray Cullis



5. Division of Responsibility

Participants highlighted their concerns regarding the division of responsibility for flood protection and management and the consequences of this division. It was clear from the contributions that many participants felt that the lack of a single body responsible for all areas of flood management led to confusion and questions over accountability. Participants were unsure of the specific role of each of the different bodies that held responsibility for flood management and felt that the blurred divisions caused unnecessary bureaucracy.

"The Agency claim to maintain the Bumpstead Brook, but, why does their remit end just where the brook enters our property and that of 25 other property owners? Our section is not considered to be a "main river". Why should such bureaucratic demarcation exist? After reading my comments, you will, perhaps, like me, wonder what the actual function of the Environment Agency is, and, judging by their performance and attitude to the problem, do we need them. Hopefully, this forum will be effective in bringing the concerns of flood victims to public notice and bring the relevant agencies, which are supposed to protect us, to task." J. Mitchell.

"Having attended numerous Council meetings (as a flooded, not hooded, observer), it is apparent to me that there are far too many different bodies, not working in collaboration or cooperation with each other, with differing responsibilities. How an ordinary ratepayer is supposed to make sense of this, flood only knows." Colin Walsh

"Responsibility for flood prevention is chaotically fragmented between local authorities, internal drainage boards and the Environment Agency. There needs to be a clear line of responsibility and accountability so that the threat and problem of flooding can be dealt with once and for all." Archie Norman MP for Tunbridge Wells

"The very first process to establish is that of co-ordination of flooding response management; i.e. establish a chain of command with regard to progressing the implementation of capital works to prevent future flooding in at risk sites. This is sorely lacking at present with no one individual body taking the lead role." Jason Sherwood

"While I am sure it will never be possible to meet every need, it is essential that monies made available are used to best effect. I hope in



upstream misuses the watercourses on their land then it can cause problems downstream and either side of the watercourse.

Every penny the Environment Agency has to spend on flood defences must be. Instead of endless finger pointing and blame finding, why don't all of those parties responsible for drainage and watercourses, work together to provide continuity over whole river catchments and help alleviate the effect of flooding for everybody." Anon

"As an individual, the confusion of bodies responsible for dealing with floods and their aftermath makes it a daunting task to get anything done. If this Floodforum.net does not address this plethora of competing bodies and find some way of making the whole admin more simple, logical and comprehensible, it will have failed." Colin Walsh

"Responsibility for flood prevention is currently fragmented between local authorities, internal drainage boards and the Environment Agency etc. Establish clear line of responsibility and accountability." (Anonymous)

"The whole issue of Flood Management crosses many boundaries and I believe it is vital to have a single point of contact - or responsibility, to ensure that the whole country is dealt with realistically and that long term planning is instituted and executed on the basis of need and priority. Currently the individual departments/organizations/Agencies have little or no interest in areas that are not part of their remit. Whilst it stops overlapping tasks it also stifles debate and co-operation. What is needed is a "Senior Political figure in Government" to take overall responsibility and "to make it happen" or one agency to become the "lead agency" on all related aspects.." Bob Harvey

The future role of the Environment Agency in flood defence and management was also discussed with some participants suggesting that responsibility should be transferred to one single body, independent of the Environment Agency.

"The Environment Agency is not the place for flood defence to continue in the future. A commonly held opinion at grass roots level within the industry, consultants and public servants, is that it is too big, is being hindered by the Agency and should be a separate organisation."

"We must have one body preferably at central government level and centrally funded that's responsible for flood prevention always monitoring and controlling developments and flood alleviation. At the moment going to local meetings for flood victims, where sometimes the representative from either the council or the EA can't be bothered to turn up is unproductive and totally



However other participants felt that a new body was not the solution to current flood defence problems.

"I would caution against the creation of a new flood defence agency. It is easy to blame an organisation when it suffers problems, and indeed it is a historical political approach to change the structure and name to illustrate a 'new start'. In reality this is what would happen:- There would be a major restructuring, involving probably millions of pounds and paralysing much flood defence work during the period of reorganisation. Many of the (sadly very few) experienced engineers and other professionals would take early retirement or take alternative employment, rather than move to new offices. It is likely that the service would be further centralised, involving fewer offices and appears even more remote than it does today." Jack Mason

5.1 Emergency Services

There were concerns also about the division of responsibilities in flood emergencies. Many participants agreed that there was lack of funding to ensure quality flood response. They pointed out a need to provide emergency response teams with the tools and skills necessary to protect people and themselves. Also the importance of public education to help to people to protect themselves was recognised.

"Responsibilities for actions to be taken in Flood Emergencies are divided between the Environment Agency, County Councils, District Councils, the Police, the Fire Brigade. No-one is responsible for co-ordination of these organisations. It is even unclear who should provide sand bags. It is essential that responsibilities are clarified and that one of these bodies is appointed coordinator with powers to act in an emergency." David Wilkinson

"The primary contribution to the flood death rate is lack of preparedness and training on the part of emergency response agencies and lack of public safety education on the part of the public. The ability to provide local rescue personnel with the necessary training and equipment needed to not only protect themselves in times of severe flooding, but also save the lives of victims caught in floodwaters, will continue to be extremely slow and sporadic. Haphazard response planning, the lack of inter-agency coordination, and a mad scramble to "do something" leads only to tragedy." Nancy Rigg

"Nothing has been spent on training for the responders or as a matter of fact on training for the community. I also feel that too much time and money is being



"Grass roots level responders in this dangerous area of specialised human endeavour in the UK, need funding before and after the event both for equipment and training. Successive Governments in the UK are wholly responsible for the lack of real progress in this area of emergency response. We have seen " It will be alright on the night" attitude from them for far too long as they have passed the buck to local authorities (without the funding to go with it)." Patrick Stanton

"... while awareness of flooding has increased significantly in recent years, still few people take the threat of flooding seriously enough to take steps to prepare. While 83 per cent of people interviewed could cite simple precautions they could take in advance of a flood, only nine per cent do take action to prepare in advance.

The Agency is therefore establishing links with community groups, notably the National Flood Forum, to help get grass roots feedback on how to raise awareness and generate action at the local level." Liz Cook

"The attitude of some of those 'victims' was of more concern for their property than their lives...or mine!" Andrew Vickers

5.2 Environment Agency

Whilst a couple of participants praised their local Environment Agency staff;

"The very best form of communication was always our wonderful EA workers in Bewdley." Penny Griffiths

A number of criticisms of the workings of the Environment Agency as an organisation were expressed.

"The Agency had insufficient staff in flood defence and are still having difficulty recruiting. There is a lack of appropriate technical skills (ICE Presidential Commission 2001). Those who have retired are no longer available. Those who were transferred to private consultants have moved on to other specialisms as there has been insufficient flood defence work to occupy them. There were few new graduates being trained for flood defence." Anon

"Red tape is a major problem in the Agency. Even small schemes may require 10 different consents. A scheme may be designed by a consultant (say for a local council) checked by the Environment Agency and approved by DEFRA for grant



6. Communicating Flood Risk

The provision of clear, accessible information for assessing flood risk and for flood warnings were a major area of interest for participants. Many of the participants had direct experience of using the range of flood warning devices currently available to differing degrees of satisfaction.

Participants discussed the merits of different methods of calculating flood risk. A number of participants felt the current method of measurement was too crude. The mapping of flood risk areas was also criticised for being too unspecified leading to properties being unnecessarily branded as high flood risk.

"There is a debate in the flood defence industry at present about communicating risk. At the moment, everyone uses the term "1 in 100 year" etc to convey the magnitude of a particular flood. This is somewhat confusing, as it indicates a 'period' to the risk - ie, if you have a large flood this year, you won't get another for 100 years. However, there is no period aspect of this risk - it actually refers to an annual event. The proper notation of risk is 1 in 100 (or 1%) chance of a flood of such magnitude occurring every year. The question is, what do people understand by the terms 1 in 100 year, or 1 in 100 annual chance? What is the best way of communicating the risk so that everyone can understand?" Andy Burton

"In my opinion the notion of return period has come to the end of its usefulness. With land use change and climate change potentially altering flood frequency it is misleading to use return period which has the implication that the situation is static. It is important to realise that the current 1% flood may differ from the 1% flood in say 10 or 50 years time. For example the assumption of a 20% change in river discharges in the future as possible scenario for the effect of climate change suggests that the current 1% flood flow may become a 2 to 3% in the future. Perhaps it might be helpful to concentrate on the likelihood of flooding at a location over some set period of time which would indicate the type of prevention measures and preparedness which are appropriate. If the life-time (70 years) chance of flooding is say evens (or 50%) - as it is with the 1% flood - then the standard of preparedness required is quite different from that of an evens chance of flooding in say a 5 year period." Paul Sameuls

"1% annual risk of flooding at an address is all very well, but only conveys part of the story to the average householder, or potential householder, who would perhaps prefer to know where the water is actually "likely" to reach. For example,

potentially flood should the so-termed 100 year event flood occur. The evidence locally is that the 100 year modelled event has not occurred if that is deemed to be the level set for the indicative mapping.

Locally it is being requested that the EA should take immediate steps to fund a levels survey to identify the floor heights of all properties in order to prove the level of risk to insurance companies and householders. The present position is that a crude assessment has created more problems than it is trying to solve and should be withdrawn and replaced solely by the known limits rather than estimated pending a detailed modelling." Roger Fell

"Several people have mentioned the crudeness of the E.A flood indicative maps. It should be clarified that both contributors refer to the internet site maps (I AGREE).

However the actual mapping as supplied by the E.A to the Notts Police in particular and other agencies prior to the autumn floods 2000 proved to be very useful and accurate (E.A Lower Trent Area). This accuracy has I believe been further enhanced by integration of Autumn 2000 data." Ray Cullis

"From a local government point of view we are trying to inform our customers as best we can. Only a few days ago we sent out a new leaflet to all parishes with a flood risk. Just this morning we received an irate phone call from a parish clerk sitting on the box of leaflets asking what to do with them. We can dish out leaflet after leaflet and sandbags galore. If the people themselves do not take a certain amount of responsibility for their own situation, this situation will not improve". Sabine Furlong

No information was given out and the attitude was that "they must expect to be flooded". Fair comment had even basic maintenance of the main River Pinn been undertaken - but despite pleas from elected representatives nothing was done until the properties were inundated twice and the Television and our M.P. were involved."

Jim Butterworth

6.1 Flood warnings

The effectiveness of the flood warning systems is obviously critical to effective flood response and protecting individuals' safety.

"The flood warning system in Bocking Church Street, Braintree was not in place as the flood took the authorities by surprise. Improvements had been made in the area and it was thought that the flooding would not be too bad.

A sheltered housing project, where elderly and younger people with learning



"We do have particular problem here in Worcester where the EA recognise that their gauging point is so far south of the city (and severely influenced by flooding on the Teme) that they really need a new gauging point up stream of the main city bridge. Unfortunately this doesn't appear to be a high priority so until then the predictions we get in Worcester will still be tinged with blind guesswork!"
Andy Walford

One of the major sources of flood risk information is the Environment Agency's Floodline. There was both praise and criticism for the service and a number flood warning officers were able to explain the limitations, uses of the service.

"Floodline data is limited to a message posted 0810hrs: time now 1730. We are deemed on FLOODWATCH. Rain is easing but we know that to the west there are several FLOODWARNINGS in force on the Trent and tributaries - all water yet to arrive. We are told the water is rising. What does that really mean - nothing. At what rate is the water rising: over what period is the computer modelling predicting it will rise. Those downstream could then be given some broad method to estimate the potential rise - or it could be announced together, again - with timings. What this expensive system has just told me is what we can all see free of charge: river is raising and its raining!!" Roger Fell, Gunthorpe Flood Alleviation Group

"The Environment Agency uses as many communications channels as possible to provide information about flood risk, the whole purpose of which is to give advance warning of flooding which people are able to act on. Text based services like Teletext and Ceefax are both important methods of disseminating flooding information. We are at present reviewing the presentation of information on Teletext, clearly there are cost implications of buying new pages. We primarily use the text based services as a trigger alert to ring Floodline or access the Floodline website for further flooding information. We will be adding the Floodline web address to the text based services and agree that text based services are an important universal tool to drive users to get more information from the Floodline website and Floodline telephone service."
Giles Cheyne Web Developer National Flood Warning Centre

The response from participants acknowledged that there is some confusion among those at risk about flood warning codes.

"After having flooded over 12 times in fewer years up until the change of flood warnings in September 2000 we had known exactly what to expect. The critical



of the River Severn having experienced floods from 8" to 54 ½" right through ground floor level." Penny Griffiths

"I can see that the new (fairly new) system of flood warning codes is useful for the media - you can survey the warnings on the EA website and see which areas of the country are subject to flooding. It's also a convenient way of displaying the state of rivers on weather forecasts. However, the flood warning codes are a very blunt instrument for delivering warnings to those about to be flooded.

The banded flood warning codes degrade the quality of the original prediction by introducing a system of further bands for administrative convenience. Presumably as the technology is refined, and more information becomes available for computer modelling, the broad bands of the flood warning codes will become even more inappropriate for those actually at risk of flooding.

It's the Floodline recorded prediction that I'll use as my source of information. It's pointless to use the wider banding of the flood code system (the Flood Warning band here covers levels from 4.2 to 4.8 metres) when a much more precise warning is available.

Disastrous results occurred when the new system of Flood Warning Codes was used on the Automated Voice Messaging System in our area during the flood of autumn 2000. At 9 a.m. on the morning of 30th October, 2000, I obtained a prediction from the Floodline recording of a final level of around 5.5 m. and we immediately started clearing the houses in our row, all of which would be flooded by that level of water. The first AVM came at lunch time, only giving a Flood Watch Warning of 3.8 – 4.2 m. with no indication that the river would go on rising. The AVM system then worked through the 'phone numbers again giving a Flood Warning message of 4.2 – 4.8 m., still with no indication that the river would continue to rise. Eventually, a full thirty hours after I had got the prediction of 5.5 m from Floodline, the AVM delivered the Severe Flood Warning of a level above 4.8 m. – still with no mention that an eventual level of 5.5 m.

Those people who took the Flood Watch warning from the AVM system (no houses are affected at this level) were re-assured and didn't bother to come home from work or to move furniture, losing valuable time.

If the Environment Agency wants to continue to run this much publicised system of flood warning codes to deliver warnings to the public, the solution must be: to skip the lower band AVM warnings if it's known that they will be eventually superceded; to deliver straightaway the highest band that will be reached; to avoid giving river levels on the warning; and to instruct people to 'phone Floodline for the predicted river level." Gillian Holland

"I have just visited the Environment Agency web pages where there is currently no flood warning in force for the River Erewash and the last electronic update was November 2001. HOWEVER when I telephoned Floodline a Flood Alert is in place



6.2 Media coverage

The role of media coverage in communicating flood risk and informing the public of steps they can take in flood protection was seen as a vital service by the participants however many participants criticised the way information was communicated through the media.

"Local BBC Radio Hereford and Worcester are very good in relaying flood information - but I do constantly find they are not as up to date as the flood line or EA direct information. The station say they get their information from the EA but it seems strange that the EA can be putting out different information at the same time. When a few points of a meter can mean water in the house this difference is important. At least when they said we have gone to "Red Alert" we were all carrying the same message in the old days." Penny Griffiths

"Media coverage, in common with all other disaster scenarios, has two positive functions and a negative function. Firstly it creates the level of awareness of the situation: this is immediately after the situation occurs. It highlights specific issues in respect of the human impact - every good story needs to dwell on the misery of others. Secondly, it offers for a short post event period, the opportunity to confront those who are deemed "in charge" with the question - why did this event happen - what are you doing to prevent it happening again? Without that media interest individuals might not easily have a mechanism to bring the problem to a level of importance sufficient to motivate the decision-makers to act. The negative side is that much reporting is, at best, of very poor quality: it fails to extract answers - more time is spent with cliché images of some reporter standing in a couple of inches of water talking to some hapless PR person from some agency who invariably is trotting out bland rubbish about how well the agency / authority is doing and often pointing to some carved line in some historical object saying that it is less than the flood of the time of the Roman Invasion!!" Roger Fell / Gunthorpe

Participants also felt that the 'right' information was not always available to the general public.

"What I would also find useful in terms of protecting the health of my young children would be some information on the biohazards most prevalent in the river. Should public health recommend a vaccination programme eg Hep A, Typhoid to those living in high risk flood areas?" Sara Fellows



7. Insuring Property in Flood Risk Areas

A major concern among participants living in flood risk areas was the difficulties involved in insuring their property and possessions. Many participants recounted their experiences of being rejected by insurance companies due to the high risk of flooding in their area; other participants were facing rapidly increasing premiums. Participants highlighted the knock on effect of property devaluation, as people are reluctant to move to uninsurable properties. The experiences of participants were that flood protection measures had little impact on the willingness of insurance companies to cover high-risk areas.

"We live in an area prone to flooding (Ilkeston, Derbyshire) and with no imminent or planned future flood defence. Three of the major insurance companies will not do business with our area at all - others are set to follow suit which will leave our residents with negative equity through unsaleable properties. Mortgages will be unavailable through lack of insurance cover and people will be reluctant to move into the area with the knowledge flood damage costs will have to be borne personally - not a great selling feature!! I personally now have to pay some hefty premiums for my contents cover and according to press releases, flood protection is set to be eliminated from house contents cover for those living in flood plains without adequate defences.

Got to dash - river level needs checking." Diane Charlton

"My own property has suffered sewage flooding twice in Twelve months, I've had to find alternate accommodation for the last 14 months and as such now that the property is approaching completion I'm looking to offer it for rent. Trying to find an insurance company that will handle the property for my own use is next to impossible but to find one that will insure the property for rental purposes as well seems totally out of the question.

To add to the points raised on this and other threads on this Forum, regarding insurance, my local water company, Severn Trent, are currently carrying out remedial actions to improve my properties resilience to flooding. They have also offered to write a letter to confirm their actions to any potential insurers, unfortunately I have yet to find an insurance company that will accept such a letter. I have spoken to my current Insurer regarding the issue of remedial actions, who have told me that they have no policy of carrying out preventative measures, and will eventually just refuse renewals once they consider the property un-insurable." James George

"We were unlucky to be among the flood victims last October (we live next to the



renewal. For the insurance company to continue the premium they are insisting that my premiums are more or less doubled, that I must install some level of flood protection and most worryingly of all, my excess flood cover must be increased from £1,000 to £15,000. Such a level of excess gives rise to the utmost concern. An Estate Agent in nearby Kelvedon reported towards the end of last year that he had lost the sale of a property in that village because an insurance agency had informed the prospective purchaser that they were not prepared to insure properties in either Kelvedon or Coggeshall because of the flood risk." Mr Ryder

"Has the Government made it clear to all who live in or near flood risk areas that from 1 January 2003 insurance will not be available for contents and buildings damaged or lost due to flooding?

The Association of British Insurers will not continue to insure such households unless the available protection from floodwater reaches a high standard. This standard is a risk of not less than 1:200 years return of flooding. This is unattainable in all but a few homes.

If some protection is present, a risk of not less than 1:100 return of flooding may be considered. This too is an extremely high standard.

We feel that the Department of the Environment, Food and Rural Affairs (DEFRA) has not acted quickly enough or not at all to help householders following the Autumn 2000 floods. This is an urgent matter. When a house is sold the new owners will be unable to get insurance cover for loss or damage due to flooding. This would deter buyers and leave householders either doomed to live for ever in their homes or sell at a fraction of the house value." William White

A participant from the Association of British Insurers clarified the difficult position of the insurance industry when assessing whether to insure high flood risk areas and highlighted the industry's hope that the Government will increase funding for flood protection measures.

"To contain these costs it is essential to reduce the flood risk facing many properties. Recognising the Government could not solve the problem overnight, insurers (through the ABI) responded to concerns about the continued availability of flood cover by committing for two years to provide flood insurance (except in exceptional circumstances) for existing domestic properties and small business policyholders. The two-year period applies from 1 January 2001 to 31 December 2002. By the end of this period, insurers are looking to the Government to commit to greater investment in defences; radical curtailment of development in flood risk areas; and faster and more consistent decisions on where flood defences are built. ABI is seeking an increase in annual capital spending on flood defences by at least £145m per annum. The return on this capital expenditure will



“Those who cannot obtain insurance for their homes are simply devastated. The Government really must try and help those who cannot insure their homes. I have suggested to the Minister, Andrew Smith MP that the Government looks at encouraging the insurance industry to act as one and produce a Government backed scheme to help those who are considered a higher risk. Nick Harvey MP for North Devon.”

Participants highlighted the need for good advice and guidance from insurers regarding preventative methods and a continuing dialogue between home-owners, bodies with responsibility for flood protection and management and insurance companies to ensure a up-to-date and relevant assessment of flood risk is used when calculating premiums.

“It would have been really useful if my insurers (perhaps through the appointed managing surveyors) had provided me with a list of 'these are the additional things that you could do' when initial work was being planned even if I had to pay for them. I am now in the situation of having to pay for airbricks/door covers etc that could have been put in before we returned to the house. To mitigate the risk in future (good news for insurer & insured)and save money for the householder as contracted were paid & on site at the time I'm not complaining re. my premiums. They haven't gone up greatly, but I would have appreciated more support re damage limitation from the industry. Neil Rodgers”

“This is the encouragement of insurance companies to recognize these developments and encourage their use either by replacing flooded properties with more resistant products (footing the extra cost if applicable) or reducing the future premiums of house-owners who provide such improvements at their cost. Neil's experience is obviously not a one-off. It would be a big shame if all these useful innovations arising out of positive actions of which ABI is a part goes wasted. The winners will be everyone as the ever skyrocketing flooding percentage of insurance pay-outs can start spiralling downwards. Fola Ogunyoye”

“We need to be able to give specific information to insurers on works carried out and planned. It is not possible to give utter guarantees of the effect of works when our weather conditions are not predictable but it should be possible to offer updates on works (for example the substantial work in Hatton since 2000) which should allow insurers to define risks and ensure appropriately. Mark Todd MP”



"I am appalled by the prospect of a 'flood tax'. Individuals living in 'at risk' areas already have to cope with the dread of having their lives and homes wrecked by foul water and debris entering their premises, being unable to obtain satisfactory insurance at a reasonable price, the lowering of property prices and even the inability to move house as a result of failure to sell. Why should victims of flooding be targeted for special treatment? The sick do not pay for the National Health Service, nor do parents of small children pay for their education. Government policies including inappropriate building, failure to manage unsatisfactory farming practices and bad maintenance of ditches and culverts often plays a major part in flooding and individuals cannot take responsibility for situations beyond their control." Creina Stanton

Some participants were concerned with how the proposed flood tax would be administered and how the funds raised would be distributed.

"Now that the government has raised the question of a flood tax, you can bet your life (a) it has been contemplated for some time (b) it is a way of sending off the insurance companies who want the govt. to take over flood compensation now that it's looking like a bad deal and (c) just like road tax, it's highly unlikely that the tax will be spent on the purpose for which it is designated. There is a fundamental flaw - which is hopefully being addressed. No-one is responsible for flooding. And everyone is (including, says the govt., the home owners). And so a flood tax will fail because every body associated with flooding will have its hand out, including the water companies who would like a little extra for the Chairman's bonus." Colin Walsh

- "1. Current flood hazard maps are too inaccurate at present for the tax to be equitable. Better flood hazard maps are being prepared, showing areas that might flood in the 100, 200 and 1,000 year event. However, it is very difficult to be accurate about such low frequency extreme events, especially when Ordnance Survey elevation data is subject to a vertical error of plus or minus 3 metres.*
- 2. If the tax is based on property values, this will mean that the amount raised to defend those living in low value properties will be lower. Does this mean lower standards of defence in those areas?*
- 3. Flood defences built from a local flood tax may simply displace the problem upstream or downstream.*
- 4. The imminent withdrawal of insurance cover for houses in the most hazardous areas after the insurance guarantee runs out at the end of 2002, could mean large scale mortgage foreclosures, with a consequent reduction in property values. If this is reflected in the basis for the flood tax, it will mean that the tax collected from those who need the defences the most, might not be sufficient to*



rates and intentionally impose on us this new tax because years of inadequate foresight and long term strategic planning?" Montagu Road Flood Action Group

In recognising the need for increased funds for flood protection and alleviation, but rejecting the concept of a tax on the 'victim', participants suggested alternative tax methods.

"My idea is a tax on any new building OFF the flood plain as these are the developments which will in the future aggravate any potential flood risk. The government or at least the advisors who have just thought up this Flood Plain Tax are just not thinking straight, the existing householders and businesses who are trapped in the flood plain are the LAST ones who should be Taxed. As everyone seems to agree, any new building or development wherever it is will cause an increase in the rate of runoff after rainfall, is it not time to levy a drainage tax on all new building or development that is OUT of the floodplain. The money raised could be spent on flood protection schemes and river maintenance to alleviate flooding. The floodplains throughout the UK are rising, properties that were once safe are now at risk. The residents of houses built long ago in what is now the new floodplain are at the mercy of any new developments OFF the floodplain, so these are the ones to that should fund the work necessary to carry away the extra floodwater created." Mike Spires

"Evesham has been developed over the last few years with out of town shopping centres, large housing estates and a huge by-pass. All of the run-off from this is hitting the River Avon so fast that it can't get away and consequently the Avon is in flood far more often now than it was 20 years ago. We have paid for our own flood defence which is nearly completed and shouldn't be expected to pay a tax because we live where we do. A tax on NEW buildings which could affect flooding levels is a far more sensible idea. Now that we have our own defence (built at our own expense) I wonder if we will see a reduction in our insurance premium? AND if the tax is introduced whether we will be exempt as we have "got off our butts" and done something for ourselves." Sandra Francis

"The tax should be put onto all properties that add to the problem we suffer. All the new houses that are and have been built in our village have an impact on the water that flows into the watercourse that we back on to. I am happy to pay an increased tax so long as the tax paid will be used to prevent further flooding to MY property and if that is not done I have the right to sue the government for the cost of rectification to my property." Barry Powell

"On the principle 'polluter pays' any developer that builds in a flood plain should pay a levy and also implement flood alleviation measures which should be



"Many Internal Drainage Boards already levy a charge on developers which is used to provide the capital improvements to drainage channels to deal with the extra flows from new developments." Stuart Hemming

Other participants expressed their conditional support for a flood tax.

"I, personally, would gladly contribute to a flood tax, if I could be assured that it would be entirely directed towards building modern and effective flood defences." James Mitchell

"I live in N.Yorkshire and if the government does bring in the new flood tax i will be one happy person and I will also pay it happily, the reason? Well up to now most, if not all of us have never managed to pinpoint one body to take responsibility for the rivers, Well if I am paying the government £60 to £100 per year for flood defences I will be knocking on the door of the government if they are ever breeched. If I pay a company for a service and they don't deliver, then we have courts to settle it for us, why should the government be any different, they are not above the law.... So BRING on the flood tax I will pay it happily." James Hamd

"Why should people living in the vicinity but on top of a hill have to carry the costs of the extra attention we need. I am sure that this is not a popular view - but it is a personal one!" Penny Griffiths

9. Flood Protection Aids

Participants felt that the cost of flood protection aids prohibited many individuals from being able to take steps to protect their homes. Participants representing local flood support groups raised the issue of including flood protection aids in grant schemes. It was felt by many participants that if individuals were given greater support to protect their own property through simple flood protection aids (flood doors etc.) the overall burden of flooding could be reduced.

"The Cuckmere Flood Forum is pressing for Flood Protection Aids to become 'grantable' under the District Councils' Home Improvement Grant Scheme already in place. The government must be encouraged to extend this scheme to cover flood protection aids, in the same way as loft insulation became a big issue when we were all being encouraged to save energy - fitted flood gates, air brick covers etc. would improve flood prone properties and reduce insurance cover." Vanessa Minns, Secretary Cuckmere Flood Forum

Others are unable to consider such a scheme as their budget only allows them to look one year ahead. The answer must be a comprehensive national scheme in the form of government grants towards the installation of flood protection products. The grant scheme should include not only products such as flood doors and airbrick guards, but also provide incentives to make houses more flood-resistant." Gill Holland, The National Flood Forum

The need to properly test and accredit flood protection products was highlighted to ensure their effectiveness and quality.

"Pre-requisite to grant schemes being made available to domestic homes, it is essential that products receive independent assessment and certification. That is the end to which the Flood Protection Association is working towards and it will liaise with H R Wallingford to establish test criteria. The FPA is currently inviting firms and individuals involved in the design, manufacture and supply of flood protection products and services." Paul K Denham, Chairman Flood Protection Association

"There are number sites flooded in Autumn 2000, covering a relatively limited number of properties, where there may not be a viable Flood Protection Scheme for the community. The feasibility of self-help measures at such sites is to be examined. The proposal is to find ways to encourage and support local residents in their installation of individual property protection measures. Research work supported by the Environment Agency and a number of other contributors is being undertaken by HR Wallingford which will provide accreditation for such products. This will help in the development of effective and reliable alternatives to sandbags for individual households. Local trials will be led by the Local Authority who with the Environment Agency and other partners will also provide oversight. National co-ordination of the trials will be provided by the Environment Agency with a strong link to the joint DEFRA/EA R&D programme; they will also report outcomes to local and national partners.

The main objectives of the trial are to:

- 1. demonstrate the effectiveness of the EA's flood warning service in association with self-help measures;*
- 2. test effectiveness of arrangements with exercises in addition to assessment following flooding events;*
- 3. to identify practical problems in the use of self-help protection measures such as lead time, installation and storage; and*
- 4. to demonstrate the value of this approach to a range of partners (residents, Local Authorities, Environment Agency (EA), DEFRA, Association of British Insurers); this will include savings to Local Authorities currently providing a sandbag service and a demonstration of the possibility of this approach reducing*



trying to protect their properties, VAT just seems to add insult to injury. a bit of pressure please for a zero rate."
Hugh Williams

10. Lessons from other countries

Participating in Floodforum.net were a small number of flood victims and flood management experts from countries other than the UK including the USA and Germany. Participants highlighted the lessons the UK could learn from the international practices in flood management, insurance and planning.

"Perhaps the greatest thing we can learn from another country is the American method of undertaking the insurance liabilities once an area has been placed in a flood risk zone. This government - and previous administrations - have rested on the belief of a free market in insurance." Roger Fell

"Other countries feel that it is important to provide first class flood response units. Equipment and Training is of the highest order and the community benefit from this investment. Look to America, Germany and Australia as just some examples. As someone has already mentioned, the FEMA organization in America is really on the ball unlike this country. Probably the best equipped, financed, trained and organized is the Federal Republic of Germany's Governmental disaster relief organization. The T.H.W. Throughout the republic 810 technical platoons are maintained each with 40 volunteers. Each platoon consists of one command squad with 4 volunteers and three special sections with 12 volunteers. In total 8 regional units, 66 secretariats, 665 local units, 1 federal college with two training facilities. 866 full time employees and some 61,500 volunteers and honorary staff. Annual budget EUR 119,618,000." Ray Cullis

"In the USA, two states -- California and Texas -- have established statewide swiftwater & flood rescue response models, where rapid response teams are available to assist local emergency responders during times of high flood risk. The key to these innovative, lifesaving programs is planning, standardized training & equipment, and a commitment to pre-deploying resources when there is a high "probable risk". Other states are starting to develop similar programs, including Virginia, Pennsylvania, and North Carolina, but we still lack leadership at the federal level through FEMA (the Federal Emergency Management Agency)." Nancy Rigg

"My understanding is that the Dutch have a different perspective on flood defences. In Holland the population have "security" from flooding up to a defined



solutions. One problem is that the way we fund flood management will inevitably produce short-term solutions, - concrete is quicker than trees. We need a longer term, more sustainable approach. Taking up some other points, on civil defence, in 2000, just before the floods, the government announced that the civil defence grant could no longer be used for peacetime emergencies, only for "hostile acts of a foreign power". There was no public debate or consultation about this decision which will severely hamper the efforts of emergency planning officers." Anon

However participants suggested that the different approaches adopted across the UK may provide important lessons nearer to home.

"We don't need to look as far afield as the USA. In fact the USA system has many problems for government; it is expensive, and encourages floodplain dwelling. The UK has a strong private insurance market, which can and does provide cover which is the envy of many other countries, but the government has to play fair by controlling floodplain development and adopting reasonable measures to manage flood hazards (not just spending more on expensive defences, but other, non-structural solutions). Scotland offers an excellent example of how this can be done. Scotland has a system of informal flood appraisal groups in which planners can discuss strategies with all interested parties, including insurers and SEPA (the Scottish equivalent of EA) and arrive at strategies which are in the community's best interests. In addition, local authorities in Scotland have a statutory duty to maintain watercourses and can be taken to task or possibly even sued if they do not." David Crichton

"Those of us residing in the Fens of East Anglia have for centuries paid a "Flood Tax" in that we have paid drainage rates to Internal Drainage Boards/ Commissioners to take away to sea the massive quantities of water draining into this area from central England. These Boards maintain and manage their networks to such a standard that, although we are mostly below or just above sea level, like the Dutch areas on which our system of drainage is based, flooding is not an issue. Come visit the Fens and see how it is done." Anon

11. Priorities

The priorities for action to ensure effective flood management suggested by participants included:

- ?? Make decision-makers accountable
- ?? Establish a single body responsible for flood management
- ?? Use canals and rivers commercially



anything. Everyone knows that rivers need dredging, the canal and river network should be used commercially, there is definitely an opportunity for carriers of non-urgent goods. If a few of the olden methods were used I am sure we would not have the troubles we have." Elaine Slater

"The important thing is that to the people who experience flooding the source of the water is nearly irrelevant to the amount the damage and distress caused. This raises the issue of the need to tackle ALL the potential causes of flooding rather than focusing on one or two of current concern. Thus the cooperation of several agencies is needed as well as the land owners along the smaller watercourses. Also different design standards apply to the various sources of flooding, surely there needs to be some minimum agreed standard for public safety". Paul Samuels

"I would suggest the areas which need addressing first are:

- a) review of the cost/benefit formula and realistic funding to carry out those schemes which are physically possible.*
- b) Investigation into insurance problems and possibility of government insurance or purchase of blighted properties.*
- c) Look to insurance companies to provide flood sensitive restoration whenever possible." Phil Downing*

"In my view, priority issues are ensuring SUDS are adequate and remain adequate, and secondly, the need to ensure Local Authorities have adequate resources to map and inspect ordinary watercourses and then be pro active in ensuring these are not obstructed or pose unacceptable flood risks to new developments." Anonymous

"There is a need for holistic flood management. The mitigation of flood damage and loss does not only depend upon the actions during floods but is a combination of pre-flood preparedness, operational flood management and post-flood reconstruction and review." Paul Samuels

"I think that an important priority would be to recognise that structural flood defences are not a panacea. As shown on this forum, many other solutions exist for long-term flood management. Structural defences should not and cannot be eliminated entirely. When appropriate, they must be adequately funded, constructed and maintained, but they should never be our first or only approach." Ilan Kelman