

Summer Floods 2007



Worcestershire Joint County and District Councils Scrutiny Report

November 2008

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CHAIRMAN'S FOREWORD

This report is the first Joint County and District Council's Scrutiny exercise. The Group have tried to take a strategic view on the immediate response to the floods by local/public agencies and the recovery since and considered what action needs to be taken to ensure there is a clear approach to dealing with any future emergency.

The Group have sent comments to the national Pitt Review and have made a number of recommendations to County Council, District and Parish Councils, and other agencies as appropriate.

Even though the county suffered the worst floods in living memory in summer 2007, we must remember that there were many examples of individual courage, good neighbourliness, agency co-operation and emergency planning that helped prevent the situation from deteriorating yet further. Many people worked throughout the night of 20 July to do their utmost to help those stranded or suffering from the floods.

Whilst it is only natural for a scrutiny task group to make recommendations the Group do not wish to give the impression that organisations did not cope or that there were many failings in the response to the emergencies. This is simply not the case and it is clear from the evidence given that agencies did cope very well. Many agencies, including the emergency services, have already received public recognition for the excellent and professional manner in which they responded and I would like to take this opportunity to echo these comments. The manner in which BBC Radio Hereford and Worcester met their public service duty must also be held in the highest regard.

It is essential to remember that over twelve months on, many people have personal and emotional worries caused by the flooding emergencies and for them life has still not returned to normal. We must also remember though that some lives were lost in the emergencies and our sympathies are with the families concerned.

The scrutiny has heard from many organisations, professional bodies and witnesses and their contribution is very much appreciated. I have to thank my fellow members of the Scrutiny Task Group for their time and patience during very long meetings and for working in a spirit of true co-operation.

I must thank the County Council's Scrutiny Team for the way they have supported this scrutiny exercise.

Finally, many organisations have carried out their own reviews and are already implementing improvements as a result. The Group have tried to avoid duplication and I applaud the ongoing improvements in drainage, flood protection and emergency procedures. There is no point in making recommendations unless they are acted upon and lead to future improvements. As Chairman of this Joint Scrutiny Task Group I can assure the people of Worcestershire that the Group will be finding

out how its recommendations have been acted upon and what progress has been made in managing flood risk, in twelve months time.

Martin King

Lead Member of the Summer Floods 2007 Joint Scrutiny Task Group

EXECUTIVE SUMMARY

Floods badly affected many parts of Worcestershire in mid June and July 2007. Recovery work is still continuing and many agencies have been involved in assessing what happened in the immediate aftermath and longer term and the lessons that can be learned to better prepare them for the next event. Throughout its consideration, the Task Group has tried to maintain a strategic perspective rather than concentrate on very localised issues.

Over 12 months on, the impact of the 2007 floods are still being felt by many people and businesses. Experience seems to suggest that flooding instances are becoming more frequent and it is clear that there will be other instances of flooding in the future. Obviously we sincerely hope that the impact of any future event is not as severe as those experienced in June and July 2007. However it is necessary to plan for the worst-case scenario.

The Task Group has gathered evidence from a wide range of sources, including residents, county, district and parish councils, fire and police emergency services, water company, environment agency, media, and other organisations involved in the immediate response to the floods and the recovery since.

It is clear from the evidence given that agencies and organisations coped well in responding to the emergencies. The Group hope that the work it has undertaken and the recommendations brought forward will help ensure that there is a clearer and more co-ordinated approach to the management of any future events and to address the steps which can mitigate the effect of future flooding.

Detailed findings and recommendations are set out in Section 10 of this Report. These are too numerous to include in this Executive Summary. However, this summary attempts to give a flavour of those areas where the Group has highlighted findings or made recommendations. For ease these have been cross-referenced with paragraph numbers from the main Report.

In relation to **communications** the Group recommend that:

- partner organisations of the Local Resilience Forum (LRF) should review how they communicate with each other, paying particular attention to the relationship between 24/7 (ie Fire, Police and Health) organisations and non routinely 24/7 organisations (ie County District and Parish Councils). Protocols and procedures should be developed and widely communicated (*paragraph 4.7*). Additionally the wider understanding of the roles of partner organisations and their relationship with each other should be tested as part of future training exercises (*paragraph 4.9*)
- local radio car/s should be physically stationed in close proximity to Silver Control (*paragraph 4.19*). Also that the LRF should review how it provides information to the public via the media, recognising the role of local radio in keeping the public informed and prioritising information to local radio in advance of the national media where appropriate. (*paragraph 4.23*)

- a system is developed, whereby each Category 1 Responder organisation can post relevant public information on (or linked to) a designated space on the same web-site. *(paragraph 4.25)*
- during a flooding emergency a single point of contact should be available to parishes to enable them to report local conditions (such as road conditions). *(paragraph 4.32)*
- the LRF also be asked to consider in more detail, the production of plans to support people who become stranded on motorways. *(paragraph 4.38)*.
- the Highways Agency review its emergency procedures to ensure communication with a County Council Highway Authority officer, who should liaise with named officers in districts *(paragraph 4.42)*

Severn Trent Water

In relation to **Severn Trent Water** the Task Group are aware of the work they are doing in respect of revising their emergency plans and have asked that the needs of Worcestershire residents are taken fully into account as part of these revisions. *(paragraphs 4.63 – 4.65)*. In addition the Group has recommended that appropriate representatives from Severn Trent at a strategic level, commit fully to participating in the Land Drainage Partnership. *(paragraph 7.25)*.

Other related recommendations are that **water companies**:

- discuss with the Government how to address drainage issues for new developments more effectively when finite capacity is exceeded and explore whether water companies could become statutory consultees as part of the planning process;
- act on reducing illegal connections to the infrastructure causing sewage backup/surge and water run-off into drains as soon as legislation allows; and
- invest to solve the problem of pumping stations cited on flood plains becoming unusable during floods. *(paragraph 7.34)*

Recommendations made to **County and/or District Councils** include:-

- it should be made clear to Councillors how they will be briefed on a developing emergency and how Councillors can find out what is happening. *(paragraph 5.10)* Linked to this, all councils should review and update their emergency contact list and ensure that they are shared widely *(Paragraph 5.11)*
- the use of 'hublets' should be further developed and form a key part of the County Council's response to any future emergency *(paragraph 5.7)*
- the feasibility of introducing a system to enable Customer Contact Centres to re-direct callers be investigated *(Paragraph 5.15)* and structures for the provision of relevant information to Customer Contact Centres should be drawn up and put in place as soon as possible. *(paragraph 5.17)*
- alternative transport arrangements for areas known to flood are contained within the county's emergency plans and that an exercise be undertaken to test the effectiveness of such arrangements *(Paragraph 5.36)*
- the County and district councils should develop protocols for sharing appropriate staff resources during recovery work *(Paragraph 8.35)*

- the County Council discusses with the Chamber of Commerce ways of promoting improved business advice and continuity planning (*paragraphs 5.22 and 8.24*)

In relation to **drainage issues** the Task Group recommends that:

- the County and each District Council ensure that suitably qualified officers in each district can take the lead responsibility for checking the condition of drainage assets (watercourse and ditches); feeding information into and sharing information with the Land Drainage Partnership (*paragraph 7.8*).
- each district council assess whether they have sufficient technical capability and if necessary ensure that a suitably qualified individual is available to advise District Planning Committees about drainage issues and flood risk implications for each development. (*paragraph 7.37*)
- District Councils should consider proactively making use of their powers to serve enforcement orders on landowners who do not comply with requests to maintain their ditches and/or watercourses (*paragraph 7.48*) and develop an arrangement whereby if a riparian land owner can not afford or is unwilling to repair water courses, then under the Local Government Act 2000, they should carry out necessary work and where possible claim the cost of works back from the land owners or their estate. (*paragraph 7.50*)
- that a flood risk map should be produced by the District Councils and held by the County Council for every parish and urban area affected by floods, showing which properties and roads had flooded and the extent and direction of flow of flood waters. The District Council should carry out the mapping, with assistance from parishes. Information needs to be fed in to the County Council, and shared with members of the Land Drainage Partnership. (*paragraph 7.17*). *As this could involve much work, priority should be given to those areas prone to flooding (paragraph 7.18)*
- the Land Drainage Partnership should consider relevant research (as highlighted in the Pitt Review (Chapter 4) to find a practical cost effective way to model and map areas at risk from flash flooding. (*paragraph 7.15*)
- Local councils should consider maintaining an inventory of local equipment held by farmers which could be used to alleviate flooding and drainage problems either during a flood or as part of the recovery (*paragraph 7.27*)

The Task Group further **recommend that**:

- the County and District Councils consider ways to improve advising both rural and urban householders of their drainage responsibilities, including details on the availability of grants as well as the consequences of non-compliance. (*paragraph 7.44*)
- the County and District Councils develop protocols for sharing appropriate staff resources during recovery work after emergencies where appropriate. (*paragraph 8.35*)

In relation to **parishes** the Group recommend that:

- consideration be given to a door knocking flood warning system at local level and incorporated into parish emergency plans where appropriate (*paragraph*

5.29). In urban or non parished areas the possibility of existing neighbourhood watch areas taking on this responsibility be considered (paragraph 5.30)

- the County Council's Emergency Planning Team assist with the development of a blue print or toolkit, providing more than just a skeleton, for other parishes' emergency plans, with the aim of encouraging parishes to create their own emergency plans for use in appropriate circumstances. Arrangements should also be put in place to ensure that such plans are effectively communicated. (*paragraphs 5.33 and 5.34*)
- parishes which have formed their own flood groups, consider incorporating, promoting and deploying flood resistant products as part of the work of the group. (*paragraph 6.15*)
- consideration be given to a greater utilisation of the local knowledge on road drainage and watercourses held by Parish Lengthsman. Parish Lengthsman should be contacted wherever possible to advise the County Council drain clearance teams of main flooding problem areas. (*paragraph 7.42*)

National Government

The Group has made a number of recommendations to **National Government**. These include:-

- the need for Government to review its own policies to ensure consistency and alignment policies and procedures (including ways of minimising flood risks such as examining farming methods and land use (paragraph 7.30)
- the production of national guidance to clarify the criteria for contaminated land (*paragraph 8.10*).
- considering some form of compensation for landowners clear up costs; and/or
- considering the creation of some form of national labour force or using the Army to help with clear up of flood debris; and
- production of greater clarity on the circumstances in which it is appropriate for local authorities to provide clear up help to flood victims. (*paragraph 8.16*)

Joint Scrutiny Task Group

The Group recommend that:

- this Task Group reviews the outcome of the insurance industry's proposal to agree common minimum information on flooding insurance claims which should be provided to flood victims in 12 months time. (*paragraph 5.42*).

Finally, it is clear that much good work has taken place during and after the flooding emergency. We have been impressed with how organisations are keen to improve any future response and how they are already implementing improvements. In the absence of an overarching body being responsible for flooding issues we support Pitts recommendations 90 and 91 which require upper tier local authorities to set up scrutiny committees to annually review arrangements for managing flood risk at least after the first twelve months. The Group believe that this joint committee is best placed to carry out such a review and therefore recommend that:

- this scrutiny task group be re-convened in 12 months time to review the outcomes from its findings and recommendations, as well as review progress on arrangements for managing flood risk. (*paragraph 9.3*)

SECTION 1 - INTRODUCTION

1.1 Floods badly affected many parts of Worcestershire in mid June and July 2007. Recovery work is continuing and many agencies are involved in assessing what happened in the immediate and longer term and the lessons that can be learned to better prepare them for the next event.

1.2 Approximately 7 inches of rain fell in Worcestershire during July (average usually 1.5 inches). Figures from the Met Office¹ show that this was the wettest May to July since the England and Wales Precipitation record began in 1766. Exceptionally heavy and prolonged rainfall on Friday 20th July led to fluvial (river) flooding of the Severn, Teme and Avon and their tributaries and extensive localised flash flooding due to an already high water table.

1.3 Worcestershire Partnership is co-ordinating the economic recovery process. The Worcestershire Land Drainage Partnership has been established to address issues such as how the organisations can improve the county's network of watercourses, ditches, drains and culverts. Some Parish Councils affected are working on plans for future emergencies and on how to alleviate the effects of any future flooding.

1.4 During summer and autumn 2007, Worcester City, Redditch, Bromsgrove and Wyre Forest District Councils reviewed and discussed the flooding and Wychavon and Malvern Hills District Councils have completed scrutinies to investigate the issue within their Districts respectively. The police, health authority and fire and rescue authority have also reviewed their response to the floods.

1.5 Also over the summer 2007, the Worcestershire Partnership and the County Council's Cabinet agreed that a joint countywide scrutiny would be useful as it was considered that the County Council and its District Council partners would benefit from working together to achieve a stronger final scrutiny report with "one voice".

1.6 Nationally, the Environment Food and Rural Affairs (EFRA) Select Committee report was published in May 2008 and this helped inform the final Pitt Review report published in June 2008. We have looked at how our recommendations might link to Pitt's and more importantly how the Pitt proposals can be given a more local focus.

1.7 The County Council intends to address flooding as one of its priorities in its Local Area Agreement (LAA). In anticipation of the new duty on local authorities to scrutinise progress of LAA targets, we hope this joint scrutiny will also help inform the process for future LAA scrutiny.

¹ www.metoffice.gov.uk/corporate/pressoffice/2007/pr20070726.html

Effects of flooding in Worcestershire

1.8 Approximately 10% of the land area of Worcestershire is at risk of flooding (about 167km²), the second highest percentage of total land at risk from flooding in the West Midlands. Approximately 6,000 buildings were affected, with approximately 3,500 residential properties, with nearly 800 businesses and thousands of acres of agricultural land being severely flooded. The economic cost to the County was estimated at £6.4 million per week during the height of the flooding.

1.9 Affected areas included settlements along the rivers Severn, Avon and Teme (and their respective tributaries) with significant problems in many local villages.

1.10 Numerous roads and bridges across the county were impassable and closed, together with the M5 in Gloucestershire and M50, which resulted in traffic backing up in Worcestershire. Public transport, including rail services were also severely disrupted. The B4084 collapsed at Cropthorne and was not re-opened until February 2008 having a significant impact on surrounding villages. The nationally renowned Severn Valley Railway was closed for months due to major landslips.

1.11 Hundreds of Worcestershire residents living near the border with Gloucestershire lost their water supply when the Mythe treatment works was flooded.

1.12 Over 12 months on, the impact of the 2007 floods are still being felt by many people and businesses. Experience seems to suggest that flooding instances are becoming more frequent and it is clear that there will be other instances of flooding in the future. Obviously we sincerely hope that the impact of any future event is not as severe as those experienced in June and July 2007. However it is necessary to plan for the worst-case scenario. The Group hope that the work it has undertaken and the recommendations brought forward will help ensure that there is a clear and co-ordinated approach to the management of any future events and to address the steps which can mitigate the effect of future flooding.

1.13 Throughout its consideration, the Group has tried to maintain a strategic perspective rather than concentrate on very localised issues.

SECTION 2 - TERMS OF REFERENCE, MEMBERSHIP AND METHODOLOGY

Terms of Reference

2.1 The aims of this scrutiny exercise were to:

- review the immediate response to the floods by local/public agencies and the recovery since;
- consider what action needs to be taken to ensure there is a clear approach to dealing with any future emergency;
- consider and send comments to the national Pitt Review; and
- make recommendations to County Council, District and Borough Councils, and other agencies, organisations and individuals as appropriate.

Membership of the Scrutiny Task Group (The Group)

Members

Martin King (Wychavon DC) Lead Member
Mike Biddle (Malvern Hills DC)
John Cairns (Worcestershire CC) until May 2008
Liz Tucker (Worcestershire CC)
Michael Chalk (Redditch BC)
Peter McDonald (Bromsgrove DC) until May 2008
David Pardoe (Bromsgrove DC) from May 2008
Fran Oborski (Wyre Forest DC)
Geoff Williams (Worcester City)

Administrative and Research Support

John Jordan, Suzanne O'Leary (until April 2008) and Stella Wood, from Worcestershire County Council's Scrutiny Team.

Methodology

2.2 The Scrutiny Task Group (the Group) has gathered evidence from a wide range of sources, including residents, county, district and parish councils, fire and police emergency services, water company, environment agency, media, and other organisations involved in the immediate response to the floods and the recovery since.

2.3 The evidence was gathered mainly during three long sessions. Each attendee was asked to outline their views or experiences on the immediate response to the floods and recovery since, and whether there were any possible areas for improvement. This was then followed by a general discussion, with an indication of the issues to be raised with each group.

Session 1 – 31 March 2008 - Discussions with:

- National Flood Forum
- Local Media
- Local Resident
- Highways Agency
- Parish Councillors

Session 2 – 7 April 2008 - Discussions with:

- West Mercia Police
- H&W Fire & Rescue Authority
- Local Resilience Forum
- Severn Trent Water
- Environment Agency
- Land Drainage Partnership (Represented by Head of Service from Worcestershire County Council and Director of Environmental Services from Wychavon District Council)

Session 3 – 28 April 2008 - Discussions with:

- National Farmers' Union
- Country Land and Business Association and a local farmer
- Chamber of Commerce
- Worcestershire Partnership
- Emergency Planning Manager (Worcestershire County Council)
- Highways Officers, Worcestershire County Council

2.4 The details of the Scrutiny Task Group's activity is listed at [Appendix 1](#). A list of the key documents considered is at [Appendix 2](#).

2.5 The scope of the scrutiny is divided into seven main issues:

- The Immediate Response to the Emergency (Section 3)
- Communications (Section 4)
- Advice, Guidance and Warnings (Section 5)
- Flood Alleviation (Section 6)
- Surface water flooding/drainage (Section 7)
- Business Recovery (Section 8)
- Conclusions (Section 9)

SECTION 3 – THE IMMEDIATE RESPONSE TO THE EMERGENCY

3.1 Arrangements are in place to deal with emergencies. These arrangements are set out in the Civil Contingencies Act (2004) and are explained further in paragraphs 3.9 – 3.18

3.2 In accordance with these arrangements, District Councils set up rest centres and Worcestershire County Council set up its emergency response centre to co-ordinate the response of local authorities. A public Emergency Helpline was set up by the County Council. Multi agency emergency co-ordinating groups were set up at Worcester Police station and later at Hindlip Police HQ.

3.3 Rest Centres were set up by District Councils in Upton (which was completely cut off) Kempsey, Powick, Tenbury, Pershore, Evesham (X2), Droitwich, and Worcester (X3). In addition to the planned response we were struck and gratified by the amount of work being undertaken locally within villages and areas to help manage the situation. An example of this was the many local parishes and local businesses who opened up their premises as unofficial rest centres for many stranded motorists, or who offered support in a variety of other ways.

3.4 Highway Authority and Ringway staff worked through the night, monitoring road conditions, putting measures in place to keep the public safe and keeping traffic moving where possible.

3.5 Over the course of the weekend 1185 people were recorded as being rescued by the Fire and Rescue Service across the County. Additional assistance was provided by 7 helicopters, 9 other Fire and Rescue Services, the Severn Area Rescue Association, the RNLI and the Army.

3.6 In a carefully orchestrated operation between the Health Authority, Ambulance Service and the County Council two residential care homes were evacuated. Over 90 long-term care patients were moved to temporary alternative accommodation.

3.7 School children were unable to get home, parents were unable to collect their children, some of whom were returning from trips out of County. Many were stranded overnight in schools and special schools.

3.8 Based on experiences and evidence received, the immediate response to the emergency overall was managed very well, by staff working beyond the normal call of duty. However there were a number of issues which arose around communication, rescue equipment, the adequacy of flood warnings, drainage, flood mapping, flood barriers and water supply. In compiling this report we have sought to highlight these issues so that they may receive attention and, where appropriate and feasible, improved.

How do organisations respond during an emergency?

3.9 Historically, responsibility for responding to and recovering from emergencies (civil resilience), passed to local authorities after the Second World War. The perceived emergencies had initially focussed on the threat from

Eastern Bloc countries. Over time, the focus changed and it was accepted that there was a need for a review of emergency planning procedures and wide consultation followed. This resulted in the Civil Contingencies Act (CCA) 2004, which now requires organisations to work together effectively in a more formalised framework.

Local Resilience Forum (LRF)

3.10 Worcestershire already had well established emergency plans and procedures which were easily adapted to the requirements of the CCA when this came into force in November 2005. The West Mercia Local Resilience Forum (LRF) is a multi-agency group comprising bodies within West Mercia carrying out this role. The Local Resilience Forum is a process and has no separate legal personality of its own. It provides Category One Responders with the means to cooperate in the effective delivery of these duties under the Act that need to be developed in a multi-agency environment. The LRF is currently chaired by Paul West, Chief Constable of West Mercia Police.

3.11 Organisations are divided into Category 1 or Category 2 responders. Category 1 includes county and district councils, national and local health agencies, the blue light emergency services and the Environment Agency. Category 2 includes the utilities and the Highways Agency. Category 1 responders also have the right to make their own decisions for example, whether to evacuate a local authority home (see Appendix 3 for further explanation of Category 1 and 2 responders).

3.12 The CCA established 7 Statutory duties (for category 1 responders) relating to emergency preparedness and response, including:

- Carrying out risk assessments;
- Drawing up and maintaining plans based on the risk assessments;
- Maintaining arrangements for warning and informing the public if an emergency was likely to occur or had occurred and for providing them with advice;
- Co-operation between Category 1 and 2 responders;
- Information sharing;
- Business Continuity – to have plans in place; and
- To promote Business Continuity Management to the business and local communities.

3.13 The Group looked at how the West Mercia Local Resilience Forum functioned to meet the needs of Worcestershire during the July event. We examined the extent to which “Category 2” responders were engaged and asked what role do Parish Councils consider they could play in responding to future emergencies.

3.14 The LRF seeks to ensure partner agencies co-ordinate resources so they can respond effectively when incidents occur. The LRF also exists to warn, inform, advise and educate the public about developments in the area of Civil Resilience.

3.15 The LRF meets every 4 months and rotates round member organisations. However, during an emergency, the police lead the response. The Strategic Co-

ordinating Group (SCG or Gold Command) is normally set up at Hindlip, as this location has the necessary communications facilities, although any location with the necessary facilities and support could be used.

3.16 The hierarchy of the command structure is known as Gold, Silver and Bronze. In broad terms, Gold Command make strategic decisions (eg to evacuate a large area) and communicate up to COBR (national Government). Silver Command (or Silver Control) make tactical decisions (eg how an evacuation would be carried out). Bronze Command make operational decisions (eg carry out an evacuation). See Appendix 3 for further explanation of Gold Silver and Bronze.

3.17 Membership and terms of reference for three silver groups have been established, one each covering Shropshire, Worcestershire and Herefordshire. Silver groups were set up in each county although conditions were most severe in Worcestershire on 20 July.

3.18 West Mercia LRF extends from Shropshire to the Black Mountains, including the counties of Herefordshire, Worcestershire, Shropshire and Telford & Wrekin so one district may well be much more affected than another in any given emergency.

Role of the Fire and Rescue Service

3.19 The Fire Service is responsible for rescue work, extinguishing fires and dealing with dangerous chemicals or substances. They will assist the ambulance service with casualties and the Police to recover bodies. The health and safety of personnel working within the inner cordon remains with individual agencies, which should ensure that personnel arriving at the scene have appropriate protective equipment and are adequately trained and briefed.

3.20 Sir Ken Knight, the Chief Fire and Rescue Adviser, has published a report into the Fire and Rescue Service Operational Response to the Summer 2007 floods. These recommendations will feed in to the final Pitt Review and will be for Government, regional and local resilience forums, individual Fire and Rescue Authorities, utilities and other bodies to take forward.

3.21 Hereford and Worcester Fire and Rescue Authority have carried out their own scrutiny into the response to the summer flooding emergency. One of the weaknesses identified in the reviews both locally and nationally was that no one body was funded for flood rescue equipment and training. It was at the discretion of the Chief Fire Officer for each area. Fire authorities historically carried out flood rescues but they were not funded specifically to do so. In practical terms, in addition to Hereford and Worcester Fire and Rescue Services own specialist resources, South Worcestershire received further assistance from a number of other Fire and Rescue Services, the RNLI, Severn Area Rescue Association (SARA) and Air Sea Rescue.

3.22 Another weakness was that there was no co-ordinated national system for receiving mutual aid. Existing arrangements depended on an ad-hoc system of locally determined responses. Hereford and Worcester Fire and Rescue Service led the establishment of a national flood support response team at the request of

the Communities and Local Government (CLG). The team advised on the deployment of specialist rescue resources as the Summer events unfolded.

3.23 The Group support Pitt's Recommendation 39 which recommends that the Government should urgently put in place a fully funded national capability for flood rescue, with Fire and Rescue Authorities playing a leading role, underpinned as necessary by a statutory duty. Strategic co-ordination of these assets will also be included.

SECTION 4 - COMMUNICATIONS

Communicating the Emergency

Declaring an emergency

4.1 The Group considered the procedures relating to who declares an emergency and how is it decided. West Mercia Police explained that any Category 1 responder could declare an emergency. The criteria for doing so is when that responder reaches a situation where it is seriously obstructed in performing its duties and when the environment, safety and welfare of the public is likely to be put at risk. We have been advised by the police that declaring an emergency is not an exact science. In a 'rising tide incident', Commanders and senior managers will communicate when the prospect of an emergency looms and will move toward the declaration of an emergency if appropriate. The criteria for Category 1 Responders to consider when declaring an emergency are provided for within part one of the Civil Contingencies Act and are described at 1.14 to 1.23 (page 5) of the Emergency Preparedness Guidance issued with the Act.² The LRF Co-ordinator felt that decisions taken were in line with the criteria.

4.2 On 20 July 2007, Wychavon District Council had realised that flooding was becoming serious and staff were sent home early. The situation deteriorated throughout the afternoon. School children were unable to get home, major roads had become impassable and rest centres were beginning to be set up from 5-6pm.

4.3 The major emergency was 'declared' at a meeting that took place between 'Gold' representatives of the fire service, police and county council (who also represented the views of District Councils at that meeting) in the late evening of Friday 20 July 2007. That meeting took place at the Fire Service HQ and was effectively the first Gold meeting once the major emergency had been declared. The first meeting of the Strategic Co-ordinating Group took place on the Saturday morning at Hindlip, and at that meeting, the County Council representatives represented District Councils by agreement, although some Districts did attend that and subsequent meetings. Following that meeting senior officers of the County Council briefed senior officers of the District Councils.

4.4 The recollection of the Deputy Managing Director leading Wychavon District Council's response on that day was that the Council was in dialogue with County officers during the afternoon with a two way exchange of information. In the early evening it was clear that the event was still escalating and it was likely

² Extract from the Emergency Preparedness Guidance issued with the Civil Contingencies Act - Criteria for Category One Responders to consider when declaring an emergency
1.22 The two tests are:

- where the emergency would be likely to seriously obstruct its ability to perform its functions;
- where the Category 1 responder: would consider it necessary or desirable to act to prevent, reduce, control, or mitigate the emergency's effects, or otherwise take action; and would be unable to act without changing the deployment of its resources or acquiring additional resources.

One of these two tests must be met for the main duties of the Act to apply.

that a major emergency would need to be declared. There remains a perception by some members in Wychavon that a major emergency should have been declared earlier. Gloucestershire's scrutiny (pg 61 - para 2.2.1) found a lack of clarity over when their Gold Command had been set up. With hindsight, representatives from the police we spoke to agreed that Gold Command should have been set up earlier. In some respects, who declared the emergency and when is not relevant to our considerations. However, what is important is there must be clarity in future about the declaration of an emergency and subsequent communication.

4.5 One of Pitt's recommendations (43) is that Gold Commands should be established at an early stage on a precautionary basis where there is a risk of serious of flooding. This is a recommendation the Group would wholeheartedly support.

4.6 It is crucial that all authorities present at Gold Command are clear on their responsibilities for cascading information to other organisations, and that information is shared in a timely fashion. It is clear from the evidence presented to us that procedures for how and when 24/7 organisations (ie Fire, Police and Health) communicate with non routinely 24/7 organisations (ie County District and Parish Councils) needs to be clarified.

4.7 The Group therefore recommend that partner organisations of the LRF should review how they communicate with each other, paying particular attention to the relationship between 24/7 organisations and non routinely 24/7 organisations. Protocols and procedures reflecting agreed ways of working should, in future, be included in the LRF communications plan, and widely communicated to ensure future clarity. Exactly who attends the LRF routinely and who attends Gold command in an emergency should be clearly identified from each member

4.8 The Group also found that there could be better understanding by the Police and Fire Authorities of the role of a district council during an emergency and its relationship with the County Council. The role of different tiers of local Government need to be communicated better to the police and other LRF partners. This point is also applicable to other partner organisations and we will return to this point later in our report.

4.9 The Group recommend that the LRF takes the opportunity as part of future training events to ensure that there is a full understanding of the role of its partner organisations and their relationship with each other.

4.10 The LRF's own review revealed a number of challenges. It showed that greater clarity was required on how an emergency is declared, the thresholds attached to declaring the emergency, how and where their Gold Command (also known as the Strategic Co-ordinating Group or SCG) is set up and the purpose attached to it³. **The Group are pleased that this has been recognised and that discussions are taking place to ensure greater clarity in future.**

³ 1st bullet point, page 20 of West Mercia Local Resilience Forum's Strategic Review – Summer floods 2007 - Final Report.

Media Communications

4.12 The Group are clear that the role of local and national media is quite different. The local radio and press provides an information service and sees its role as having a responsibility to the local community, whereas the national media invariably wish to report on breaking news stories and move on. The summer floods were a huge local story which became a huge national story and key press officers were besieged by regional and national media each bringing differing demands for information.

4.13 The Group asked representatives from local radio and newspapers whether they felt they had effective communication channels before, during and after the emergency and how these might be improved?

4.14 The local media felt their needs seemed to be overlooked at some times. A representative from local newspapers (Newsquest) cited Hereford and Worcester Fire and Rescue Authority (H&WF&RA) as having accurate and timely communication arrangements whereas they found it difficult to contact anyone at the County Council on Friday (20 July) night or Saturday morning. The County Council's Emergency Planning Manager advised that the media did have a single point of contact at County Hall on Friday 20 July provided by the county council's duty communications officer. It was subsequently discovered that a major power cut in the County Hall area had contributed to the difficulties.

4.15 Newsquest felt that it was very important that all local media should have a **single point of contact** during such events to ensure access to consistent, accurate and timely information. Their preferred contacts would be experienced communications officers from the key authorities. They listed the Fire and Rescue Authority as an example of good practice. Even if there was no new information they still sought to provide public reassurance. This approach appeared to be well received by the public.

4.16 The Group have been advised that providing a single point of contact could be difficult as there are a variety of differing responsibilities and requirements for communicating information among different organisations. During the flooding emergency, one of the county council's main priorities was highways (but not motorways) whereas one of the districts' priorities was providing rest centres. The lack of a central single point of contact resulted in the media having to make multiple calls to get the full picture.

4.17 BBC Hereford & Worcester radio consider that generally it has a good relationship with public bodies and provides information to and receives a lot of information from the general public. They reported some confusion on 20 July over which roads were closed and which were open. One of the problems they encountered was apparent conflicts of information. An example of this was where the Highway Authority reported a road was closed whereas a listener might ring and say the road was passable. In these circumstances, presenters would make it clear that the accuracy of information could not be guaranteed and should be checked with the relevant authorities (although power cuts made this difficult to check on 20 July).

4.18 The Group support BBC Hereford & Worcester's belief that improved communications would result if a local radio presenter could have easier access to information direct from experienced communications officers in Silver control. This point was included as part of their response to the Pitt Review. However we also recognise that other media organisations may legitimately feel that they had a similar claim.

4.19 The Group recommend that local radio car/s should be physically stationed in close proximity to Silver Control so that updates on a situation can be delivered immediately where appropriate and ensure the broadcasting of consistent messages. As part of this we also recommend that the legitimate needs of other media organisations are not overlooked and that arrangements are also put in place to disseminate information provided to other appropriate media providers.

Communication with the public

4.20 As mentioned previously, local radio provides the main source of information to the public during an emergency. Presenters did their best to keep people informed on 20 July but found difficulty obtaining timely information initially. They felt that waiting for press releases from various organisations was not the best way to keep people informed.

4.21 The Group have heard that press releases were sent to all the local media, however we still have concerns about the level of importance attached to such releases by organisations in those areas less affected by the flooding emergency. For instance in Wyre Forest, local residents may listen to the Wyre radio and read the Wolverhampton Express and Star or Birmingham Post more often than listening to BBC Hereford and Worcester, Radio Wyvern or reading Newsquest newspapers. Residents in the North of the county may therefore have been less aware of the seriousness of the situation in the south of the County. This was a significant issue in terms of journey planning.

4.22 As a consequence and based on the evidence the Group have received, we have concluded that we are not convinced that press releases are always the best way of relaying information. **The Group also have concerns about alternative options in the event of a loss of power.**

4.23 The Group therefore recommend that the LRF review how it provides information to the public via the media, recognising the role of local radio in keeping the public informed and prioritising information to local radio in advance of the national media where appropriate.

4.24. Pitt's Recommendation 67: recommends that the Cabinet Office should provide advice to ensure that all LRFs have effective and linked websites providing public information before, during and after an emergency.

4.25 The Group also recommend that a system is developed, whereby each Category 1 Responder organisation can post relevant public information on (or linked to) a designated space on the same web-site, so that details of road closures, the location of rest centres, evacuations, public transport (for example) can be more easily checked by the public and other organisations

Inter-agency Communications

Communication with Parish Councils

4.27 The Group spoke to a cross section of parish councils as part of its research. We accept that the issues raised by them (and the good practice demonstrated by them) are not exhaustive of the actions of Parish Councils across the County but were enough to give us a flavour of the issues which affected them (and many others) during the emergency.

4.28 The Group are aware that parishes simply had to cope as best they could during the summer flooding emergency. Parishes in Worcestershire generally did not have emergency plans or contact numbers and little or no involvement with the Local Resilience Forum. They did however believe that there were many ways in which they could assist (and were willing to do so).

4.29 In some villages, where roads became impassable, motorists had to return quite long distances in some instances. Those we spoke to believe that had the Parish Lengthsmen had an emergency contact number for the Highways Authority, then they could have contacted them to arrange for 'road flooded ahead/road closed' signs to be placed at the appropriate point (currently, 111 out of approximately 152 parish councils have a parish Lengthsman).

4.30 Also, if emergency services were having difficulty finding a route through a flooded area, parishes had a wealth of local knowledge which could be very useful in these circumstances. Contact details for individuals with such knowledge within a parish, such as the Parish Lengthsman (where applicable), could be maintained for use in an emergency and accessible to relevant personnel through a designated website or other system.

4.31 The Group have learned that parishes are willing to take on a more proactive role in response to an emergency providing they have the necessary tools and support. We believe that this offer of assistance is worthy of further investigation.

4.32 The Group recommend that during a flooding emergency a single point of contact should be available to parishes to enable them to report local conditions (such as road conditions). Further, the LRF should consider the benefits and practicality of communicating with parish councils and how this might be included in the LRF Communications Plan.

Communication with the Highways Agency

4.33 The Highways Agency is responsible for England's strategic road network. It manages traffic, tackles congestion, informs road users, improves safety, and minimises adverse impacts on the environment. It is a Category 2 responder and a member of the Local Resilience Forum.

4.34 The Group asked the Highways Agency about their role when there are a large number of stranded motorists on motorways and trunk roads. We asked how it communicates with other agencies and the public in this situation and whether there are any improvements that could be made?

4.35 After the July floods the Highways Agency carried out an internal review which recommended the following:

- a. One focal point was needed to deal with bad weather or other disruption which can be foreseen, and quick command systems need to be in place;
- b. The Agency's National Crisis Management Plan needed to be reviewed;
- c. More training in civil contingency incident management was needed for senior managers.

4.36 Pitt's Recommendation 45 is that the Highways Agency, working through LRFs, should further consider the vulnerability of motorways and trunk roads to flooding, the potential for better warnings, strategic road clearance to avoid people becoming stranded and plans to support people who become stranded.

4.37 The Group fully support this and consider more should be done to avoid people becoming trapped on a motorway and to help them on occasions that they are.

4.38 The Group recommend that in addition to the highways agency and Government talking to the major voluntary services, the LRF also be asked to consider in more detail, the production of plans to support people who become stranded on motorways.

4.39 There was a perception by the Group that no information or warning to key authorities in Worcestershire had taken place before the closure of the M5 and M50 motorways. Although the Group have assumed that the Motorway network was closed, we are not convinced this was the case. The Group have heard about what should happen in practice but based on the events of 20 July, it may well be that the volume of traffic, coupled with the impact of flooding on the road network actually brought traffic to a standstill. Nonetheless, the implications had an impact on the local highway authority and on the District Councils for the numbers expected on local roads and at rest centres. There were concerns that decisions taken by other Highway Agency Regional Teams impacted significantly on Worcestershire.

4.40 Locally, the representative we spoke to believed that in the event of a closure on the M5, the Highways Agency would contact the Traffic Manager of the Local Highway Authority concerned. However, it was acknowledged that decisions taken by other Regional Teams were not communicated to all Local Highway Authorities who would/may be affected. The police were aware of the closure but it appears that neither they, the highway authority or the Highways Agency contacted District Councils responsible for rest centres about motorway closures.

4.41 **Pitt's recommendation No 64** is that the Government should issue clear guidance on expected levels of Category 2 responders' engagement in planning, exercising and response and consider the case for strengthening enforcement arrangements.

4.42 The Group recommend that the Highways Agency review its emergency procedures to ensure communication with a County Council Highway Authority officer, who should liaise with named officers in districts to alert them to the possible need for rest centres. The decision to (eg) open a rest centre or not should still however rest with the district council.

4.43 Nationally, the Highways Agency believed it had good cross border communications between its regional offices, and there was also a national control centre which could oversee cross border issues. If there were blockages on the M5, traffic from the North West could, for instance be redirected down the eastern motorway network. However, from our research, we are unclear of the extent to which this actually happened.

4.44 As part of a review of Crisis Management Plans, the Highways Agency should specifically consider cross border communications. Key partners should be involved in this review and outcomes shared with them.

Communication with the Highway Authority (County Council)

4.45 Worcestershire County Council as the Highway Authority is responsible for looking after the highway network on behalf of the public. This means both maintaining its condition and protecting the right of all to use it without hindrance. The Highway Authority believed it had responded as well as possible to the exceptional flooding on 20 July, now considered to be a 1 in 650 year event.

4.46 Communications had on the whole worked quite well although it was acknowledged there had been some problems. For instance, information on road closures started coming in and was collected and passed to broadcast agencies in the afternoon. The authority was limited by the number of officers able to input data about road closures onto the computer system and found it difficult to keep pace with the volume of closures. The Highway Authority told us that improvements have since been made in that the system has been simplified which enables more staff to input data. Another improvement is that information can now also be inputted remotely.

4.47 Another problem was caused by a power cut at County Hall from about 17.30 on 20 July 2007, so highways staff relocated to the Police Silver Control in Worcester City, where incidentally, it was easier to share information with the

police, especially on road closures. Highways officers maintained regular contact with the emergency planning team based at county hall.

4.48 Ringway and Worcestershire County Council staff worked throughout the night checking out and reporting road closures. We discovered that there were not enough road closed signs for the number of roads actually closed. More signs have since been acquired.

4.49 The Highways Agency had contacted Silver Control to ask if it was possible for certain roads to take traffic if it was diverted off the motorway before closing the M5 at around midnight on Friday 20 July. The Highways Authority was able to provide information on road closures. It has also confirmed that it was subsequently reviewing diversion routes and was liaising with network control. **The Group would like to see the outcome of this review in about 12 months time.**

Communication with Severn Trent

4.50 Severn Trent Water has a statutory duty to provide potable (drinking) water as well as treating and disposing of waste water. Unusual heavy rainfall can overwhelm drainage systems and cause flooding and in these circumstances, untreated sewage may spill out into streets and gardens. The water companies will assist where possible to reduce the amount of water escaping from the system. They will treat areas where sewage has been deposited once the flooding has subsided, where they are found to be at fault.

4.51 Severn Trent are category 2 responders on the Local Resilience Forum. The Group asked how effective are communication channels with other organisations (such as those which are members of the LRF) in relation to emergency flooding events and plans.

4.52 The Group were concerned by Severn Trent Water's presentation which concentrated on issues affecting Gloucestershire. However, the Group were more concerned that Severn Trent's senior management had to be quickly briefed on the specific role of Gloucestershire's Gold Command in this incident.

4.53 The Group were unable to identify initially whether any communication was made with Worcestershire Gold or Silver Control. This is one of a number of issues the Group have asked Severn Trent to investigate. They have since advised that their business resilience team informed Worcestershire County Council on Sunday morning, 22 July 2007. The conversation was in the context of Severn Trent giving its apologies for the County's Gold meeting that day, as all resources were diverted to managing the Mythe incident from their Crisis Management Team in Finham, Coventry. The water supply emergency for the Mythe catchment area was being managed from Gloucestershire Police HQ, where they integrated into the Gold Command structure on the same morning.

4.54 The Group consider that Severn Trent were not fully aware and prepared for the consequences of a major incident of this scale, and particularly were not aware of the effect of the closure of Mythe Treatment Works in other areas than Gloucestershire, and that information provided was unclear and confusing.

Loss of Water supply

4.55 The Mythe water treatment works in Gloucestershire flooded and was closed at approximately 3-4am on 22 July. Bottled water and bowsers were brought in to supply customers until Friday 3 August when supplies began to be restored and could be drunk if boiled. Severn Trent have also independently reviewed their response and made a number of recommendations.

4.56 Severn Trent informed the public of potential water shortages and that reserves would normally last 3-4 days under normal use. Even though people were asked to use their water sparingly the reservoirs emptied very quickly as people panicked, storing water, quadrupling normal demand.

4.57 A significant concern which was highlighted during our investigations were the number of Worcestershire properties affected by the Mythe closure and the lack of information received by them. From what we have heard, it appears that whilst the needs of Gloucestershire residents were considered, the impact on those Worcestershire residents supplied by Mythe were overlooked. This needs to be addressed in future.

4.58 Severn Trent could not advise details of the number of customers in Worcestershire affected by the Mythe closure. Severn Trent could not tell us the exact figure as their customers are divided into District Metered Areas (DMAs) which do not follow county boundaries. We understand that Severn Trent are rectifying this issue by developing much needed maps using new Geographical Information Systems (GIS).

4.59 They could tell us that 4,000 (out of 140,000 affected) customers in five of their District Metered Areas (DMAs) bordering Worcestershire were affected by the closure of Mythe Water Treatment Works. These included the villages of Bredon's Norton, Bredon's Hardwick, the hamlet of Queen Hill and rural areas within the county fed through the Sarn Hill service reservoir near Longdon, Eldersfield and Bushley Green.

4.60 The Group asked how many bowsers⁴ were deployed in Worcestershire and were told that areas supplied through the Sarn Hill link did not lose their supply immediately, as the area was kept fed by the local service reservoir (hence the initial confusion over whether some communities were supplied by the Mythe works). Bowsers were eventually deployed in the Longdon and Bushley Green areas.

4.61 The Group asked when and how much bottled water was sent to Worcestershire residents and heard that the nearest bottled water distribution point to the villages affected was the Tesco car park in Tewkesbury. A bulk bottled water drop was arranged on 1 August for properties in Longdon, two days before customers were able to drink their tap water after boiling. Severn Trent would have struggled to ensure that bottled water reached vulnerable customers had it not been for the tremendous additional support from local community volunteers.

4.62 Another problem had been where large water tankers could not get down narrow country lanes to fill bowsers. The process of providing alternative supplies

⁴ mobile tankers used for transporting and delivering water

to all in need is now being reviewed by Severn Trent in an attempt to try and solve these problems for the future.

4.63 It was clear to the Group that information about the impact on and the needs of some Worcestershire residents living near the Gloucestershire border was limited and this remains a grave concern to us. We are aware of the work Severn Trent are doing in respect of revising its emergency plans and have asked that the needs of Worcestershire residents are taken fully into account as part of these revisions.

4.64 The Group recommend that Severn Trent's revised emergency plans include emergency water drops for affected villages in Worcestershire and that smaller tankers more suited to narrow lanes are used when appropriate.

4.65 The Group understand that a planned new pipeline between Strensham and Mythe will in future provide an alternative supply, however, until this can be guaranteed, we recommend that Severn Trent should increase the size of its reserves.

SECTION 5 - ADVICE, GUIDANCE AND WARNINGS

Public Advice

5.1 The Group are aware that the Environment Agency has excellent informative brochures about flooding, and the National Flood Forum also provides very detailed information. The LRF partners also produced a joint flooding information leaflet for the June flood which was reprinted for those affected by the July floods. The Chief Executive of the National Flood Forum told us however that organisations needed to work more in partnership to produce multi-agency help and advice. She also believed that a public awareness campaign was needed to alert people to the risk of flooding and the need for household emergency plans, to include such things as grab bags containing a bank card, insurance documents and other necessities. Plans should also include arrangements for moving cars out of danger or caring for pets. **The Group fully support this view and Pitt's recommendation 60: that the Government should implement a public information campaign which draws on a single definitive set of flood prevention and mitigation advice for householders and businesses, and which can be used by media and the authorities locally and nationally.**

5.2 Information for the public relating to insurance claims could in future be made available through local media. This could assist with regard to conflicting evidence from the overstretched insurance companies and loss adjusters which led to problems and health threats such as damaged fittings and goods being retained in houses.

5.3 The National Flood Forum (NFF) had launched a directory of flood protection products and services, known as the 'Blue Pages'. The pages provide advice on flood resilience as well as advice and guidance in the event of flooding. It aims to give consistent advice to the public. One area of confusion has always been the use of sandbags and the responsibility for providing them. Although sandbags were often considered beneficial, the NFF did not support the utilisation of sandbags as they were not waterproof, required some kind of membrane to be effective and were difficult to use by vulnerable or elderly residents. Also they were difficult to dispose of after the event. **The Group support this view along with Pitts recommendation 26: that the Government should develop a single set of guidance for local authorities and the public on the use and usefulness of sandbags and other alternatives, rather than leaving the matter wholly to local discretion.**

5.4 It is clear that many members of the public and businesses were unprepared and were unsure where to seek advice during and immediately after the floods. The County Council set up a dedicated flood helpline for residents and businesses needing advice or support. This comprised staff from across the County Council, who were able to get into work, and provided information about the latest road closures, contact details for rest centres and emergency helplines.

5.5 Several days later, temporary 'Hublets' were set up in those communities worst affected by flooding so that residents could more easily obtain advice and

reassurance that something was being done. Printed advice leaflets were also produced and distributed with local free papers and County Councillors were kept informed through web-bulletins. The County Council's marketing and communications unit was shortlisted for a national award for excellence for its work during the summer floods.

5.6 The use of 'hublets' had been seen as beneficial particularly as it ensured a local dissemination of vital information.

5.7 The Group recommend that the further development of this approach (including their staffing and location) should form a key part of the County Council's response to any future emergency. To maximise their effectiveness 'hublets' would need to be established and fully operational as quickly as possible as an emergency develops

Role of Councillors as community leaders

5.8 The Group recognised, and are mindful of the valuable role elected councillors from all tiers of local Government played as community leaders. The regular supply of information from all organisations is essential if Councillors are to fully take on this important role.

5.9 The Group support Pitt's Recommendation 68: that Council leaders and chief executives should play a prominent role in public reassurance and advice through the local media during a flooding emergency, as part of a co-ordinated effort overseen by Gold Commanders. The Group believe that the development of a linked website (as recommended in paragraph 4.25) would provide a valuable tool for Council Leaders and councillors to enable them to play a more prominent role in public reassurance and advice.

5.10 The Group recommend that it should be made clear to Councillors how they will be briefed on a developing emergency and how Councillors can find out what is happening.

5.11 With this in mind, we also recommend that all Councils review and update their emergency contact lists and that they be shared widely in a co-ordinated way. Furthermore, agreed arrangements should be put in place to ensure that such lists are regularly and routinely updated.

5.12 Pitt's recommendation 66 is for local authority contact centres to take the lead in dealing with public advice before during and after a flood, redirecting calls to other organisations where appropriate.

5.13 The Group have clarified that the Worcestershire's customer contact centres would be able to support the council's emergency helpline out of hours and did so during the flooding, opening up on a Saturday 21 July to take calls.

5.14 Currently the customer contact centres' 'signpost' callers to other

organisations and have informal agreements for this. However, they do not redirect.

5.15 Taking on board the spirit of the Pitt recommendation 66, we recommend that the County Council investigates the feasibility of introducing a system to enable customer contact centres to redirect callers where appropriate (such as to the Environment Agency for advice on what to do in a flood).

5.16 The combination of the emergency helpline and customer services will provide a good robust channel for public advice and reassurance in times of an emergency. However this can only be done if the contact centres have the necessary information to give to the customer. They advised it would be useful to have some structure in place around the provision of relevant information to the contact centre staff.

5.17 The Group recommend that structures for the provision of relevant information to the contact centers are drawn up and put in place as soon as possible.

5.18 As previously mentioned (paragraph 4.25) creating a dedicated space on the same website with lists of contacts for each partner organisations such as for example, trading standards, the highways agency and the Chamber of Commerce, would be a useful start.

5.19 The Group recommend that ways of achieving this be explored further with members of the Local Resilience Forum, led by the County Council's Emergency Planning and Communications Units.

Business Advice

5.20 As a result of the floods, the Chamber of Commerce identified the need for a list of readily accessible out of hours phone lines to local authorities and other key agencies and contractors both during and after an emergency offering flexible help and advice for businesses on, for example:

- where equipment might be stored temporarily during a flooding event or for a longer period afterwards;
- suitable industrial/office premises;
- help with extracting data from computer servers; and
- a list of approved contractors - It would also be helpful to know the standard of service, the types of expertise and levels of charge likely to be levied in advance of a crisis, regardless of the event

5.21 The Chamber of Commerce did not itself have such an official out of hours phone line although would like to have such a system in place during an emergency. As part of our discussions, the Chamber expressed a willingness to work with the local authorities to develop and maintain such a list. This is an offer we feel should be taken up, as any information produced could contribute to the wider public advice highlighted in the earlier part of this report.

5.22 The Group therefore recommend that the Chamber of Commerce be invited to discuss further its offer to help local authorities maintain a list of useful numbers, including approved contractors with a variety of different skills (ie flooring, electrical, plumbing) to be called upon as required during or after an emergency.

Flood Warnings

5.23 The Environment Agency collects data on river and coastal flooding and is responsible for issuing flood warnings in these areas.

5.24 When the Met Office forecast exceptionally heavy rainfall over the region, the Environment Agency and local authorities lacked information to help predict which streets, roads or drains were vulnerable to flood. No organisation is currently responsible for issuing flood warnings to those people whose properties may be affected.

5.25 The Group spoke to a local farmer and, like others that work with land in flood plains, he was very familiar with how water levels and rivers behave. Having checked his rain gauges on 20 July, he rang to find out the river levels and rate of rise between Diglis and Saxons Lode (on the Severn) in the morning and early afternoon. He was able to predict fairly accurately from this the level to which the water would rise in the local public house and church and how high furniture should be stacked. Incidentally, due to the unprecedented rate of rise caused by localised rainfall, he received no warning from the Environment Agency even though he was due to be advised by their official flood warning line.

5.26 The Group were concerned by this fact and they consider that this needs to improve. **Pitt's recommendation No 35** is that the Met Office and the Environment Agency should issue joint warnings and impact information on severe weather and flooding emergencies to responder organisations and the public. The Group feel the public have become almost too used to receiving severe weather warnings. **We share the belief of the Pitt Review, that the current Flood Warning Codes system should be looked at afresh, starting with a 'blank sheet of paper' if needed. Furthermore, the Pitt review believes that instead of a one-size fits all approach, the warnings should be tailored to different types of people and places, particularly addressing vulnerabilities, and possibly different types of flooding⁵.**

5.27 Whilst larger towns such as Pershore had well developed emergency community plans in place, small communities, which had suffered badly, were less well equipped to produce such plans. Many villages had flooded properties, were cut off by flooding overnight and had to accommodate stranded motorists.

5.28 One of the issues raised in the Pitt Review was the need for a door knocking flood warning system at a local level⁶. Lists of vulnerable people should be kept along with named persons with responsibility for warning. The Group

⁵ Pitt Review, Chapter 21 page 332, paragraphs 21.24

⁶ Pitts recommendation 61 is that the Environment Agency should work with local responders to raise awareness in flood risk areas and identify a range of mechanisms to warn the public, particularly the vulnerable, in response to flooding.

believe that parishes are best placed to carry out this kind of warning system in rural areas.

5.29 The Group therefore recommend that such a system should be explored further and incorporated into parish emergency plans where appropriate.

5.30 In urban or non-parished areas, the possibility of existing neighbourhood watch areas taking on responsibility for warning the vulnerable should be considered.

Parish Emergency Plans

5.31 The Group believe that it would be useful if the county council could lead on providing an emergency plan template or 'blueprint' with support to aid its completion, to those parishes most likely to be affected by flooding.

5.32 How the whole process could be managed across all tiers of local Government needs further examination. Two county council emergency planning officers were currently dedicated to helping the district councils with emergency planning. We believe that this is a positive move which we applaud.

5.33 The Group recommend that the County Council's Emergency Planning Team assists with the development of a blue print or toolkit, providing more than just a skeleton, for other parishes' emergency plans, with the aim of encouraging parishes to create their own emergency plans for use in appropriate circumstances.

5.34 It was acknowledged though that all parishes were different and that in some parishes, turnover could be quite frequent, so ways of ensuring information and knowledge were passed on were important, such as perhaps a dedicated annual meeting.

Public Transport alterations

5.35 The Group asked Highways Officers what else could be done to improve the councils' response to the flooding emergency. They advised that although alternative public transport arrangements had been put in place across Worcester city during the main bridge closure, it was felt that better planning would have resulted in new routes being in place and communicated to the public more quickly.

5.36 The Group therefore recommend that alternative transport arrangements for areas known to flood are contained within the county's emergency plans; and that a training exercise takes place to test out the effectiveness of the plans and that bus operators involved are fully aware.

Insurance

5.37 Many flood victims have difficulty in obtaining flood insurance following this and other flooding incidents. The Association of British Insurers (ABI) had threatened to stop offering flood damage protection unless ministers put more cash into defences. However, millions of homes will continue to get flood cover under a deal between the Government and the insurance industry in July 2008. The industry said it would still offer cover to people at moderate risk and existing customers at significant risk although the deal still depends on the Government delivering improvements to flood defences due within five years.

5.37 Some businesses were under-insured and sought help and advice, others had insurance but sought advice on not claiming. Some companies offered services at reduced rates to help those affected.

5.38 The 2007 floods resulted in around 165,00 claims and are the most costly insured weather related event in the UK.

5.39 The Association of British Insurers recognise the potential for providing better information to customers about what to do if they are affected by flooding; what the repair process is and how long it takes; and to ensure that customers are provided with clear and concise key information about their claim⁷. They have promised to discuss with key support groups, such as the NFF, how to improve the information that is provided to customers on these issues further.

5.40 When people are buying a house, they should be able to get advice on flood risk in the same way as they get advice on fire and crime risk. At present, a basic flood risk assessment can cost up to £1,000. The Group fully support **Pitt's recommendation No 63**, that flood risk should be made part of the mandatory search requirements when people buy property, and should form part of Home Information Packs.

5.41 **Pitt also recommends (No 32)** that the insurance industry should develop and implement industry guidance for flooding events, covering reasonable expectations of the performance of insurers and reasonable actions by customers.

5.42 The Group recommend that this joint scrutiny task group reviews the outcome of the insurance industry's proposal to agree common minimum information on flooding insurance claims which should be provided to flood victims in 12 months time.

⁷ The Association of British Insurers Summer Floods 2007: Learning the lessons, page 16

SECTION 6 – FLOOD ALLEVIATION

6.1 The Group spoke to the Environment Agency, which has a statutory responsibility for flood management and defences and to manage flood risk to existing properties and assets. Some of its main duties are:

- To maintain or improve main rivers
- To install and operate flood warning equipment
- To control actions by riparian owners and occupiers which might interfere with the free flow of main rivers
- Preparation of River Basin Management Plans under the Water Framework Directive

6.2 The Environment Agency is responsible for the maintenance of "main rivers and strategic streams." For non-main rivers and streams the responsibility for their maintenance and the removal of obstructions etc. lies with the riparian owners of the land adjacent to the watercourse. Where a stream passes through a culvert underneath a highway for which the County Council is the highway authority, then the County Council is the responsible authority for the watercourse.

6.3 District Councils have permissive powers, rather than statutory obligation. **Under the Land Drainage Act District Councils have the power to serve notice on landowners to adequately maintain a watercourse**, and can prosecute for non-compliance. They cannot however ask a landowner to improve drainage. Some Districts are more proactive than others. It is hoped that the Government's new Floods and Water Bill⁸ will make district council's responsibilities clearer.

Prioritising funding for flood defences

6.4 The Group enquired as to the basis on which any extra funding for flood defences would be prioritised and found that the Environment Agency had been asked to identify watercourses at risk of flooding 25 or more house equivalents. Feasibility work was being undertaken to identify ways of alleviating flood risk in these areas. The Environment Agency are for example, carrying out flood alleviation works at Hylton Road in Worcester. The plan is to extend an earth embankment and make provisions to install demountable flood barriers. Work should be completed by October 2008.

6.5 The Environment Agency have recently received £3.6m funding to protect Upton-on-Severn from flooding. They are also currently carrying out viability studies to see whether carrying out flood alleviation works would be technically possible, environmentally acceptable and financially viable in the following locations:-

- River Severn – at Kempsey, Uckinghall and Severn Stoke
- Bow Brook – at Himbleton
- River Avon – at Pershore and Evesham

⁸ The current timetable is for a consultation Draft of the Floods and Water Bill to be published in Spring 2009

- Badsey/Bunches Brook – at Broadway, Childswickham, Murcot and Wickhamford
- Merry Brook – at Charlton
- River Teme – at Powick

6.6 Whilst this is good news for households in these areas, the Group was concerned about the needs of households outside the ‘priority area’. We heard that the NFF was sponsored by Defra to oversee pilot grant projects in 6 areas around the country to find out if giving Government grants for flood resilience/resistance measures, in areas where funding was not cost beneficial for hard engineered flood defences. The NFF had been campaigning for such a scheme for sometime.

6.7 Defra has (on 30 July 2008) set out plans to contribute at least £5 million to a scheme to support households in England which face a particularly high risk of flooding but which are not protected by traditional community level defences. The funding comes on top of any help already provided by local authorities, the insurance industry and households themselves. We understand that this current Government consultation⁹ builds on the pilot grant scheme that Defra has recently completed. It asks stakeholders for their views on whether offering households a free home flood survey would be sufficient to drive greater take-up or whether a Government grant to subsidise the costs of the measures themselves would be required.

6.8 The Group support the introduction of Government grants to those affected by regular flooding for flood alleviation/resilience products.

Dredging

6.9 The Group asked why there was less dredging of rivers in the County than twenty years ago. It was acknowledged that dredging could improve the flow of water, however, the Environment Agency looked at the consequences of dredging and whether it was sustainable. They considered the impact of dredging on flow and floodplains. Historically, dredging was carried out by river navigation authorities to allow the passage of large vessels. In practice, after dredging, rivers would quickly silt back up again making it high cost for little benefit. Some dredging was still carried out where it was felt necessary. Flood barriers and embankments were often considered more cost effective ways of reducing the impact of flood risk.

Flood barriers - Upton

6.10 Given that exceptional rainfall had been forecast by the Met Office and flood warnings issued by the Environment Agency, we asked, given the impact on the town, why the temporary barrier at Upton had not been erected on time in July.

6.11 There were a number of reasons, including

- an unprecedented rate of rise of the river

⁹ Defra’s Consultation on promoting property-level flood protection and resilience (30 July 08 – 28 Oct 08)

- the transport lorries from South Kidderminster and staff from the Tewksbury area could not get through by road (due to surface water flooding).

6.12 The Group were advised that even if the barriers had been erected, the water levels rose even higher and would have breached the temporary barriers. We were told that this in itself would have caused significant difficulties and may have informed the decision as to whether or not to erect the barriers even if they could have been erected. As the barriers had not been erected, Upton was subjected to a gradual increase in the levels of floodwater. However, had the barriers been erected and subsequently breached, there was a danger that the barriers would have collapsed and been washed away, which would have resulted in an unmanageable surge of water engulfing the town. However, funding has since become available for more permanent flood protection in Upton, removing the need for temporary barriers.

6.13 The Environment Agency accepted that generally, barriers should be stored close to the point of use. **The Group believe that the workforce responsible for erecting barriers should also live in the vicinity.**

The Role of Parish Councils in Flood Alleviation

6.14 The Group support the view that it would be an improvement if parish councils were able to identify vulnerable or elderly people in need of more effective flood alleviation products such as airbrick covers and temporary door flood barriers. Individual parish councils could then, based on their local knowledge ensure such measures were put in place quickly especially for those identified as being at risk. As mentioned earlier in the report, the Group is aware of the views of parish councils that they could (and would like to) do more. The Group believes that there is much value to be gained from using local knowledge and offers of assistance.

6.15 We recommend that parishes which have formed there own flood groups, consider incorporating, promoting and deploying flood resistant products as part of the work of the group.

SECTION 7 - SURFACE WATER FLOODING/DRAINAGE

Who is responsible?

7.0 Organisational responsibility and improving surface water drainage are two broad, but inter-linked, issues which need to be addressed, according to the recent Environment, Food and Rural Affairs (EFRA) Select Committee inquiry published in May 2008.

7.1 The Environment Agency collects data on river and coastal flooding and is responsible for issuing flood warnings in these areas. It is clear that 'No organisation either nationally or locally currently has overall responsibility for surface water flooding'.⁵

7.2 When drains begin to overflow, it is often difficult - and sometimes impossible - to determine who is responsible for certain drainage assets.

7.3 To help understand flood risk and resolve local disputes about who is responsible for flood risk, **Pitt's recommendation 16** is that Local authorities should collate and map the main flood risk management and drainage assets (over and underground), including a record of their ownership and condition, which the Group whole heartedly support.

What action is being taken at a Local Level?

7.4 The floods have provided a real focus for authorities to examine land drainage issues. We agree that the Environment Agency and local authorities need to do more to manage surface water drainage problems. The Group find that Worcestershire is keen to address the drainage issues highlighted in the **Pitt Review (recommendations 14 and 19)** and is being proactive. The Group welcome this approach.

Mapping drainage assets

7.5 A positive response to the flooding events have been the establishment of the Worcestershire Land Drainage Partnership, which brings together various organisations with responsibility for drainage. Membership includes representatives with responsibility for drainage from the county and each of the district councils as well as the Environment Agency, Severn Trent and local farmers and land owners. The Partnership formed (since Autumn 2007) to work together to reduce the likelihood of flooding by promoting and, where appropriate implementing, robust maintenance regimes. Part of this includes the preparation of a map of drainage assets.

7.6 Local parishes affected by flooding have also been proactive, with some parishes, forming their own flood defence group. Part of their work involves inviting representatives from the Environment Agency and officers from the county and district councils to look at drainage problem areas and suggest possible solutions. A group we spoke to have also identified riparian land owners and have had largely positive and receptive discussions about drainage issues – although with variable commitment to help. This kind of information is vital in creating a local flood and drainage assets map.

7.7 **Pitt recommends (No 19)** that Local authorities should assess and, if appropriate, enhance their technical capabilities to deliver a wide range of responsibilities in relation to local flood risk management. The Group are mindful of the potential resource implications but believe that additional resources should be sought from central Government to fund these extra posts.

7.8 The Group recommend that the County and each District Council ensure that suitably qualified officers in each district can take the lead responsibility for checking the condition of drainage assets (watercourse and ditches), feeding information to the drainage condition and assets map and sharing information with the Land Drainage Partnership.

Mapping surface water flood risk areas

National level

7.9 The EFRA report¹⁰ concludes that 'To be managed effectively, surface water flooding has to be addressed principally at the local level'.

7.10 As part of its 2004 *Making Space for Water* strategy, the Government announced that the Environment Agency should be granted, by 2009, a "strategic overview" role for inland flood risks, including surface water flooding, similar to the Agency's current responsibilities for river and coastal flooding. Evidence from the Agency in the EFRA report shows that "there is no common approach to the management and operation of drainage systems, a lack of joint strategic outcomes and failure to optimise expenditure, particularly within urban drainage systems."

7.11 **Pitt's recommendation (No 2)** is that the Environment Agency should progressively take on a national overview of all flood risk, including surface water and groundwater flood risk, with immediate effect. **He also recommends (No 4)** that the Environment agency should work with partners to urgently take forward work to develop tools and techniques to model surface water flooding.

7.12 The Land Drainage Partnership are working together to map important ditches and surface water flood risk areas and exploring how to develop countywide flood risk GIS maps to enable better modelling.

7.13 The Group agree with **Pitt's recommendation 35**, that the Environment Agency should make relevant flood visualisation data, held in electronic map format, available online to Gold and Silver Commands.

7.14 A Lecturer in Physical Geography at the University of Worcester has recently carried out some research into predicting where flash floods might occur in the city due to surface water runoff during heavy rainfall. The conclusions appear promising and could be useful for raising public awareness.

¹⁰ Chapter 3, para 17, Environment, Food and Rural Affairs (EFRA) Select Committee inquiry published in May 2008

7.15 The Group recommend that the Land Drainage Partnership considers this and other relevant research (as highlighted in the Pitt Review (Chapter 4) to find a practical cost effective way to model and map areas at risk from flash flooding.

7.16 Some parishes have produced their own maps of the extent and areas of flooding caused by the downpour on 20 July providing very useful historical data.

7.17 The Group recommend that the flood risk map should be produced by the District Councils and held by the County Council for every parish and urban area affected by floods, showing which properties and roads had flooded and the extent and direction of flow of flood waters. The District Council should carry out the mapping, with assistance from parishes. Information needs to be fed in to the County Council, and shared with members of the Land Drainage Partnership.

7.18 The Group recognise that this could involve much work especially for larger parishes, therefore, areas most prone to flooding should be prioritised first.

7.19 The County Council should co-ordinate sharing of the information on GIS maps, working in collaboration and sharing information with the Environment Agency.

7.20 The Group recommend that records of drainage maintenance carried out are also kept and routinely maintained and that, again, overall responsibility should rest with the County Council.

Improving drainage

7.21 In Worcestershire, the Land Drainage Partnership is considering how organisations can further work together to identify improvements that can be made to the county's network of watercourses, ditches, drains and culverts.

7.22 The County Council has allocated an additional £5m to improving highway drainage over the next 2 years. A scoping exercise has been completed by officers detailing over 800 drainage improvement issues. A spreadsheet has been completed to prioritise improvement works and clarify estimated costs.

7.23 Surface water flooding hotspots for prioritising flood alleviation work have already been identified across the County. Special project teams had been set up to solve some of the particularly complex drainage problems. These might include for example, problems with previous owners illegally piping water into the mains. Altering the capacity of culverts and storm drains and adopting privately owned drainage systems were also being considered as possibilities in solving drainage problems.

7.24 The Highways Authority felt progress was being made on some projects with the water company, Severn Trent Water, but would like better communication and attendance at a strategic level.

7.25 The Group recommend that appropriate representatives from Severn Trent at a strategic level, commit fully to participating in the Land Drainage Partnership.

7.26 Farmers we spoke to kept irrigation pumps and boring equipment for drainage works (capable of making drains under roads) and suggested these could be hired out to the local authority. The NFU already had farming machinery groups which might be of use.

7.27 The Group recommend that the County Council, in collaboration with the District Councils, should consider maintaining an inventory of local equipment held by local farmers which could be used in alleviating flooding and drainage problems either during a flooding event or as part of recovery.

Policies

7.28 The Land Drainage Partnership has developed a land drainage issues matrix to show the effects of various policies and procedures of different organisations. Farmer's felt that there were some conflicting issues for the Environment Agency as it had to choose between protecting either the farming industry or people's houses.

7.29 There were also conflicts between DEFRA land management schemes such as Entry Level Stewardship (ELS) and Environment Agency schemes. For example, in the ELS scheme, points were awarded for clearing ditches less often to protect wildlife habitats than might otherwise be advisable by the Environment Agency.

7.30 The Group recommend that the Government should review its own policies to ensure consistency and alignment of policies and procedures. Alternative ways of minimising flood risk such as examining farming methods and land use should form part of the review.

Planning to minimise run-off

7.31 Building designs could also minimise run-off by incorporating features such as a grass roof and sustainable urban drainage systems (SUDS) where water naturally soaked away into the ground.

7.32 The Group support the inclusion of developments with sustainable urban drainage systems in the Regional Spatial Strategy

7.33 When new systems are designed, an allowance is made for new development, however, it is not always known where development will occur and over what timescale. New sewerage systems are designed with a finite capacity and in accordance with current British and European standards. The issue is then one of what happens when that finite capacity is exceeded. Overland flow will result which has to be managed. The design of new developments needs to take this into account and equally as important is the potential impact of this flow on

existing development. Water Companies are not statutory consultees in the planning process yet drainage is a material consideration an issue that needs to be addressed. Insufficient capacity in drainage/sewerage systems is another cause of surface water run-off. Drainage systems were often built to cope with far fewer dwellings than are now connected. This seriously restricts their ability to cope with surface water run off in these circumstances. Severn Trent have stated during consultation with Defra that this right to connect to a public sewer should be revoked for surface water. **The Group agrees and therefore support Pitt's recommendation No 10**, 'the automatic right to connect surface water drainage of new developments to the sewerage system should be removed'.

7.34 The Group recommend that water companies:

- **discuss with the Government how to address drainage issues for new developments more effectively when finite capacity is exceeded and explore whether water companies could become statutory consultees as part of the planning process;**
- **act on reducing illegal connections to the infrastructure causing sewage backup/surge and water run-off into drains as soon as legislation allows; and**
- **invest to solve the problem of pumping stations cited on flood plains becoming unusable during floods.**

7.35 Another concern was the perceived weakness in assessing flood risk in the planning application process. The Environment Agency flood risk zones were based on river, not surface water flooding. Planning applications outside these zones did not trigger the need for an automatic flood risk assessment.

7.36 Although the Environment Agency did provide advice, we conclude that district planning committees need qualified technical advice and that there needs to be clearer Government guidance.

7.37 The Group recommend that each district council assess whether they have sufficient technical capability and if necessary ensure that a suitably qualified individual is available to advise District Planning Committees about drainage issues and flood risk implications for each development.

Drainage maintenance

7.38 Another cause of surface water run-off was inadequately maintained ditches and drains. It was highlighted that in some situations, this could help alleviate flooding by delaying runoff from going straight into rivers. Generally main drains and ditches needed to be kept clear to avoid land becoming water logged.

7.39 Sometimes the Environment Agency might encourage a farmer not to clear out a ditch, but this depended on the relevance of the ditch to the importance of drainage on the farm and the local catchment area. It was acknowledged that technical advice was needed as to whether a particular ditch should or should not be cleared. Some farmers, struggling economically, might find it difficult to afford adequate ditch and drain maintenance.

7.39 In some parishes, Worcestershire County Council had helped, by clearing road drains and gullies specified by the parish. They estimate this should prevent a number of properties from flooding again by flash floods.

7.41 Some parishes felt strongly that if the council were planning to clear out drains or ditches then their lengthsman should be contacted as he would know exactly where the problem areas were and where work should be carried out to best effect.

7.42 The Group recommend that consideration be given to a greater utilisation of the local knowledge on road drainage and watercourses of Parish Lengthsman. Parish Lengthsman should be contacted wherever possible to advise the County Council drain clearance teams of main flooding problem areas.

Grants

7.43 The Drainage Officer in Malvern Hills District Council had been working with Parishes to help get farmers to clear their ditches. A grant of 50% of costs up to a limit of £500 per landowner was available from the district council. The granting of an award under this scheme did not limit or replace the riparian landowner's continuing obligations to maintain their watercourses. Details were contained on their websites.

7.44 The Group recommend that the County and District Councils consider ways to improve advising both rural and urban householders of their drainage responsibilities, including details on the availability of grants as well as the consequences of non compliance.

7.45 In one parish, an area of flooding was caused by inadequate maintenance of ditches by landowners. This was confirmed by drainage officers. When the parish could get no adequate response from the landowners, they organised clearance and paid for it themselves

7.46 Some parishes felt they had been left to negotiate (sometimes unsuccessfully) with local landowners to maintain ditches and watercourses. Some did not know that under the Land Drainage Act, district councils had the power to serve notice on landowners to adequately maintain a watercourse, but no powers to force. The Group feel that a test case, at the earliest opportunity, would be beneficial.

7.47 The approach adopted by Wychavon and Wyre Forest, where officers proactively pursue and serve notice on landowners for not adequately maintaining watercourses, was seen as good practice. The Group feel that other Districts should be encouraged to adopt this approach.

7.48 The Group therefore recommend that all district councils should consider proactively making use of their powers to serve enforcement orders on landowners who do not comply with requests to maintain their ditches and/or watercourses.

7.49 In addition, the Local Government Act, 2000 (Part I) provided local authorities in England and Wales with a new power of 'well-being', which entitles them to do anything that might achieve the promotion or improvement of the environmental and social well-being of their area. Where a landowner cannot afford or is unwilling to repair ditches or water courses and this has a detrimental effect on peoples lives and properties, then the district council has the power under this Act, carry out any necessary work, possibly claiming back the costs from land owners or their estate.

7.50 The Group recommend that District Councils should develop an arrangement whereby if a riparian land owner can not afford or is unwilling to repair water courses, then under the Local Government Act 2000, they should carry out necessary work and where possible claim the cost of works back from the land owners or their estate.

SECTION 8 – BUSINESS RECOVERY

Farming and Business Community

8.1 To assist us in our investigations we sought the views of the National Farmers' Union and Country Land and Business Association.

8.2 They described to the Group in detail the impact the floods had had on the farming community and also highlighted the relationship between land management and potential flooding. The Government's plans to allow more agricultural land to flood to protect urban development in the future were well understood by the farming community but the issues of costs and compensation had not been finalised and this remained a significant concern to the farming community.

8.3 There was a clear impact on land management and the potential impact on surrounding communities. If farmers were to build defences to protect their crops, then communities downstream could be adversely affected.

8.4 The views of local farmers and the NFU was that if the Environment Agency wished to protect communities by flooding agricultural land there should be some form of compensation available to the farming community.

Inconsistent Financial Aid

8.5 One of the main concerns raised by the NFU was that there was no consistency of approach to financial aid for farmers. This had been raised during their meeting with Sir Michael Pitt's Group.

8.6 In the South West Regional Development Agency area, it was understood that farmers affected by the summer floods could each claim up to £2,500. In the West Midlands Regional Development Agency area however, funding was being provided by Advantage West Midlands (AWM). Loans were made available through 'Business Link' but were conditional on farmers employing a Business Link consultant to assess flood damage and create or check the viability of a business recovery plan. £2m had been made available in the region for these cashflow bridging loans but were only available to those who could not obtain funding through their own bank. It was understood that only £80,000 of this money had been claimed. Clearly, processes need to be reviewed to ensure that assistance is provided in an appropriate form in the future.

8.7 Farmers were frustrated by the complexity of application forms and lack of consistency nationally. An interest free bridging loan with fewer strings attached would have been more useful to farmers. They felt that the Government was under the impression it had provided a large pot of money (£11m) to alleviate the impact of the floods, but in reality, much of this money had not been used nor reached those in need.

8.8 The Country Land and Business Association and NFU websites provided links to guidance and contacts for farmers seeking grants.

Sewage contamination

8.9 Thousands of acres of crops on agricultural land by the River Severn were lost after being flooded with contaminated water. No crops subsequently grown on contaminated land can be sold for public consumption for 2 years after such an event. Not only does this have a major impact on the livelihood of many but there is a lack of certainty in the farming community over the classification of contaminated land.

8.10 The Group therefore recommend that the Government (DEFRA) produce national guidance to clarify the criteria for contaminated land.

8.11 It seemed unfair to farmers that Severn Trent Water were allowed to release sewage into watercourses during a flood. Farmers were not allowed to release slurry. The Group have concerns about an imbalance in standards. Farmers believe they should be able to claim compensation against water companies for sewerage contamination.

8.12 **The Group welcome Pitt's recommendation (No 32).** As part of the forthcoming and subsequent water industry pricing reviews, Ofwat should give appropriate priority to proposals for investment in the existing sewerage network to deal with increasing flood risk.

8.13 In furtherance of Pitt recommendation No 32, we also recommend that the Government explores how it might legislate to increase control over water companies to prevent discharge of effluent into rivers.

Collecting flood debris

8.14 Another impact of the floods was the effort required to collect and dispose of the huge amounts of rubbish deposited on the land after the floodwaters receded. The farmer we spoke to told us the rubbish on his land measured 60 feet round and 15 feet high. The estimated cost of collecting and disposing of flood debris came to around £4,000. Offers of help from local authorities came too late. To avoid further costs of disposal, a derogation to burn the debris was obtained (involving the completion of more forms).

8.15 The Group conclude that existing arrangements are unfair and that legislation is needed on how to treat flood debris after a flooding emergency.

8.16 The Group therefore recommend that the Government should:

- **consider some form of compensation for landowners clear up costs; and/or**
- **consider creating some form of national labour force or using the Army to help with clear up of flood debris; and**
- **produce greater clarity on the circumstances in which it is appropriate for local authorities to provide clear up help to flood victims ie Wychavon provided skips for domestic waste but it was felt that legislation was needed to change the rules on trade waste in an emergency.**

The impact of the floods on local businesses

8.17 The Group heard from the Chamber of Commerce that the impact of flooding varied depending on the type of business. Recovery could take, weeks, months or years. Many businesses were affected indirectly even though they weren't flooded.

8.18 Agricultural businesses could be affected for 12 months to 2 years through loss of seed, feed for livestock, and not being able to sell crops grown on contaminated land.

8.19 There were a number of problems and difficulties faced by flooded businesses. The Chamber of Commerce had lobbied for help from various organisations. For instance, HM Revenue and Customs needed to understand that evidence for business accounts may have been lost in floods and they agreed that those affected would not be charged if payments were late as a result. Other companies/supplies did not appreciate the impact of flooding and the requirement to modify procedure.

8.20 The Group were aware of a business which had made use of premises offered temporarily by the Chamber of Commerce and had continued trading after a short break. The business had urgently needed connections to phone lines and were initially advised by BT to fill in the necessary forms and that there would be a 30 day waiting period. The Chamber of Commerce had helped BT better understand the needs of flooded businesses and helped ensure quicker connections.

Business Continuity Planning

8.21 The need for businesses to be better prepared for flooding in the future was also identified as an area where further work was necessary. The Chamber of Commerce were running training courses to try to address generally poor business continuity planning in the area.

8.22 **Pitt's recommendation No 13** is that Local authorities, in discharging their responsibilities under the Civil Contingencies Act 2004 to promote business continuity, should encourage the take-up of property flood resistance and resilience by businesses.

8.23 The Group conclude that the County Council should await the outcome of **Pitt's recommendation 60** – “that the Government should implement a public information campaign which draws on a single definitive set of flood prevention and mitigation advice for householders and businesses, and which can be used by media and the authorities locally and nationally.”

8.24 The Group recommends that when such advice is produced, the County Council's Emergency Planning Officer should discuss with the Chamber of Commerce how to then promote improved business continuity planning in the county.

Economic Recovery

8.25 Worcestershire Partnership [the county's Local Strategic Partnership (LSP)] was a multi-agency group comprising the heads of local Government, public services such as health, learning providers, police and probation, voluntary and community organisations and local businesses within Worcestershire.

8.26 The Worcestershire Partnership Board agreed to oversee the county's flood recovery in areas such as the economy, tourism, infrastructure and the environment. The Local Resilience Forum was happy for recovery to be managed in this way as the Worcestershire Partnership already had structures in place at county level and sub structures in the districts. The LRF was interested in how the process developed.

8.27 The Management Group took the lead in developing a recovery plan to address the impact of the floods. This resulted in Worcestershire securing £725,000 from the £1m regional Flooded Area Recovery Programme funding established by Advantage West Midlands (AWM - the Regional Development Agency for the West Midlands).

8.28 County Councillors had already received details of the Economic Recovery Plan and the AWM flood recovery funding package as part of their background information pack. This showed that £600,000 was being used to fund short term projects to help the economies of affected towns whilst £125,000 supported additional promotion for activities and events to assist the tourism economy in the short term.

8.29 It was explained that the LSPs bid for £725,000 was the lion's share of £1m of available from AWM. It was understood that Shropshire and Herefordshire received about £100,000 each and the remainder went to Tourist West Midlands.

Recovery works

8.30 As part of our investigations we considered the management of the recovery phase more specifically in areas such as the economy, infrastructure and the environment. The Group were told of the processes involved and given an indication of the types and size of work undertaken as part of the economic recovery. The £725,000 obtained was from the first tranche of flood recovery money made available for public realm work and not to be confused with the £2m of flood alleviation grant money for businesses and farmers. These grants were administered by Business Link.

8.31 The County's Local Strategic Partnership wanted to send out a strong message that Worcestershire was open for business and consulted with districts' officers on the most appropriate packages of funding.

8.32 Economic Recovery Works in Malvern Hills District were now completed whereas work in Droitwich was delayed due to the need for infrastructure work by the water company. A bid would be resubmitted to AWM for the work to be carried out in this financial year.

8.33 Members believed it was a sensible approach for the LSP to take the lead on recovery from flooding and oversee the recovery plan through the Economy and Transport Theme Group. The County Council acted as a banker – District

Councils would submit claims for work to the County Council which the County Council would pay, and then claim back amalgamated sums from AWM.

8.34 One of the problems for districts was staff capacity. There might be only one officer, in either property or economic recovery, whose role covered the recovery works. A sharing of resources across councils, including those councils less affected by a specific emergency could help alleviate such capacity issues.

8.35 The Group recommend that the County and District Councils develop protocols for sharing appropriate staff resources during recovery work after emergencies where appropriate.

SECTION 9 - CONCLUSIONS

9.1 It is clear that much good work has taken place during and after the flooding emergency. The Group have been impressed with how organisations are keen to improve any future response.

9.2 In the absence of an overarching body being responsible for flooding issues the Group support **Pitts recommendations 90 and 91** which require upper tier local authorities to set up scrutiny committees to annually review arrangements for managing flood risk. The Group believe that this joint committee is best placed to carry out such a review at least after the first twelve months.

9.3 The Group therefore recommend that this scrutiny task group be re-convened in 12 months time to review the outcomes from its findings and recommendations, as well as review progress on arrangements for managing flood risk.

SECTION 10 – FINDINGS AND RECOMMENDATIONS

BY ORGANISATION

FIRE AND RESCUE AUTHORITY

The Group support Pitt's Recommendation 39 which recommends that the Government should urgently put in place a fully funded national capability for flood rescue, with Fire and Rescue Authorities playing a leading role, underpinned as necessary by a statutory duty. Strategic co-ordination of these assets will also be included. [paragraph 3.23]

LOCAL RESILIENCE FORUM (LRF) PARTNERS

One of Pitt's recommendations (43) is that Gold Commands should be established at an early stage on a precautionary basis where there is a risk of serious flooding. This is a recommendation the Group would wholeheartedly support. [paragraph 4.5]

It is clear from the evidence presented to the Group that procedures for how and when 24/7 organisations (ie Fire, Police and Health) communicate with non routinely 24/7 organisations (ie County District and Parish Councils) during an emergency needs to be clarified.

The Group therefore recommend that partner organisations of the LRF should review how they communicate with each other, paying particular attention to the relationship between 24/7 organisations and non routinely 24/7 organisations. Protocols and procedures reflecting agreed ways of working should, in future, be included in the LRF communications plan, and widely communicated to ensure future clarity. Exactly who attends the LRF routinely and who attends Gold command in an emergency should be clearly identified from each member organisation. [paragraph 4.7]

The Group also found that there could be better understanding by the Police and Fire Authorities of the role of a district council during an emergency and its relationship with the County Council. **The Group recommend that the LRF takes the opportunity as part of future training events to ensure that there is a full understanding of the role of its partner organisations and their relationship with each other. [paragraph 4.9]**

The LRF's own review revealed a number of challenges. It showed that greater clarity was required on how an emergency is declared, the thresholds attached to declaring the emergency, how and where their Gold Command (also known as the Strategic Co-ordinating Group or SCG) is set up and the purpose attached to it¹¹. The Group are pleased that this has been recognised and that discussions are taking place to ensure greater clarity in future. [paragraph 4.10]

¹¹ 1st bullet point, page 20 of West Mercia Local Resilience Forum's Strategic Review – Summer floods 2007 - Final Report.

LRF – Media

The Group support BBC Hereford & Worcester's belief that improved communications would result if a local radio presenter could have easier access to information direct from experienced communications officers in Silver control. This point was included as part of their response to the Pitt Review. However the Group also recognise that other media organisations may legitimately feel that they had a similar claim.

The Group recommend that local radio car/s should be physically stationed in close proximity to Silver Control so that updates on a situation can be delivered immediately where appropriate and ensure the broadcasting of consistent messages. As part of this the Group also recommend that the legitimate needs of other media organisations are not overlooked and that arrangements are also put in place to disseminate information provided to other appropriate media providers. [paragraph 4.19]

Based on the evidence received, the Group are not convinced that press releases are always the best way of relaying information. **The Group also have concerns about alternative options in the event of a loss of power.**

The Group therefore recommend that the LRF review how it provides information to the public via the media, recognising the role of local radio in keeping the public informed and prioritising information to local radio in advance of the national media where appropriate. [paragraph 4.23]

Pitt's Recommendation 67: recommends that the Cabinet Office should provide advice to ensure that all LRFs have effective and linked websites providing public information before, during and after an emergency.
[paragraph 4.24]

The Group also recommend that a system is developed, whereby each Category 1 Responder organisation can post relevant public information on (or linked to) a designated space on the same web-site, so that details of road closures, the location of rest centres, evacuations, public transport (for example) can be more easily checked by the public and other organisations. [paragraph 4.25]

LRF – Parishes

The Group recommend that during a flooding emergency a single point of contact should be available to parishes to enable them to report local conditions (such as road conditions). Further, the LRF should consider the benefits and practicality of communicating with parish councils and how this might be included in the LRF Communications Plan. [paragraph 4.32]

LRF – Highways Agency

Pitt's Recommendation 45 is that the Highways Agency, working through LRFs, should further consider the vulnerability of motorways and trunk roads to flooding, the potential for better warnings, strategic road clearance to avoid people becoming stranded and plans to support people who become stranded.
[paragraph 4.36] The Group fully support this and consider more should be done

to avoid people becoming trapped on a motorway and to help them on occasions that they are. [paragraph 4.37]

The Group recommend that in addition to the Highways Agency and Government talking to the major voluntary services, the LRF also be asked to consider in more detail, the production of plans to support people who become stranded on motorways. [paragraph 4.38].

Pitt's recommendation No 64 is that the Government should issue clear guidance on expected levels of Category 2 responders' engagement in planning, exercising and response and consider the case for strengthening enforcement arrangements. [paragraph 4.41] **The Group recommend that the Highways Agency review its emergency procedures to ensure communication with a County Council Highway Authority officer, who should liaise with named officers in districts to alert them to the possible need for rest centres. The decision to (eg) open a rest centre or not should still, however, rest with the district council. [paragraph 4.42]**

SEVERN TRENT

The Group consider that Severn Trent were not fully aware and prepared for the consequences of a major incident of this scale, and particularly were not aware of the effect of the closure of Mythe Treatment Works in other areas than Gloucestershire, and that information provided was unclear and confusing. [paragraph 4.54]

It was clear to the Group that information about the impact on and the needs of some Worcestershire residents living near the Gloucestershire border was limited and this remains a grave concern to us. The Group are aware of the work Severn Trent are doing in respect of revising its emergency plans and have asked that the needs of Worcestershire residents are taken fully into account as part of these revisions. [paragraph 4.63]

The Group recommend that Severn Trent's revised emergency plans include emergency water drops for affected villages in Worcestershire and that smaller tankers more suited to narrow lanes are used when appropriate. [paragraph 4.64]

The Group understand that a planned new pipeline between Strensham and Mythe will in future provide an alternative supply, however, until this can be guaranteed, the Group recommend that Severn Trent should increase the size of its reserves. [paragraph 4.65]

The Group recommend that appropriate representatives from Severn Trent at a strategic level, commit fully to participating in the Land Drainage Partnership. [paragraph 7.25]

The Group recommend that water companies:

- **discuss with the Government how to address drainage issues for new developments more effectively when finite capacity is exceeded and explore whether water companies could become statutory consultees as part of the planning process;**

- **act on reducing illegal connections to the infrastructure causing sewage backup/surge and water run-off into drains as soon as legislation allows; and**
- **invest to solve the problem of pumping stations cited on flood plains becoming unusable during floods. [paragraph 7.34]**

COUNTY AND DISTRICT COUNCILS

... temporary 'Hublets' were set up in those communities worst affected by flooding so that residents could more easily obtain advice and reassurance that something was being done. Printed advice leaflets were also produced and distributed with local free papers and County Councillors were kept informed through web-bulletins. The County Council's marketing and communications unit has been shortlisted for a national award for excellence for its work during the summer floods. [paragraph 5.5]

The use of 'hublets' had been seen as beneficial particularly as it ensured a local dissemination of vital information. **The Group recommend that the further development of this approach (including their staffing and location) should form a key part of the County Council's response to any future emergency. To maximise their effectiveness 'hublets' would need to be established and fully operational as quickly as possible as an emergency develops. [paragraph 5.7]**

Role of Councillors as Community Leaders

The Group support **Pitt's Recommendation 68**: that Council leaders and chief executives should play a prominent role in public reassurance and advice through the local media during a flooding emergency, as part of a co-ordinated effort overseen by Gold Commanders. The Group believe that the development of a linked website (as recommended in paragraph 4.25) would provide a valuable tool for Council Leaders and councillors to enable them to play a more prominent role in public reassurance and advice. [paragraph 5.9]

The Group recommend that it should be made clear to Councillors how they will be briefed on a developing emergency and how Councillors can find out what is happening. [paragraph 5.10]

With this in mind, the Group also recommend that all Councils review and update their emergency contact lists and that they be shared widely in a co-ordinated way. Furthermore, agreed arrangements should be put in place to ensure that such lists are regularly and routinely updated. [paragraph 5.11]

Taking on board the spirit of the Pitt recommendation 66, the Group recommend that the County Council investigates the feasibility of introducing a system to enable customer contact centres to redirect callers where appropriate (such as to the Environment Agency for advice on what to do in a flood). [paragraph 5.15]

The Group recommend that structures for the provision of relevant information to the contact centers are drawn up and put in place as soon as possible. [paragraph 5.17]

As previously mentioned (paragraph 4.25) creating a dedicated space on the same website with lists of contacts for each partner organisations such as for example, trading standards, the highways agency and the Chamber of Commerce, would be a useful start. **The Group recommend that ways of achieving this be explored further with members of the Local Resilience Forum, led by the County Council’s Emergency Planning and Communications Units. [paragraph 5.19]**

The Group recommend that the Chamber of Commerce be invited to discuss further its offer to help local authorities maintain a list of useful numbers, including approved contractors with a variety of different skills (ie flooring, electrical, plumbing) to be called upon as required during or after an emergency. [paragraph 5.22]

The Group conclude that the County Council should await the outcome of **Pitt’s recommendation 60** – “that the Government should implement a public information campaign which draws on a single definitive set of flood prevention and mitigation advice for householders and businesses, and which can be used by media and the authorities locally and nationally.” **The Group recommend that when such advice is produced, the County Council’s emergency planning officer should discuss with the Chamber of Commerce how to then promote improved business continuity planning in the county. [paragraph 8.24]**

Transport

The Group recommend that alternative transport arrangements for areas known to flood are contained within the county’s emergency plans; and that a training exercise takes place to test out the effectiveness of the plans and that bus operators involved are fully aware. [paragraph 5.36]

Drainage – Technical Responsibility

Pitt recommends (No 19) that Local authorities should assess and, if appropriate, enhance their technical capabilities to deliver a wide range of responsibilities in relation to local flood risk management. The Group are mindful of the potential resource implications but believe that additional resources should be sought from central Government to fund these extra posts. [paragraph 7.7].

The Group recommend that the County and each District Council ensure that suitably qualified officers in each district can take the lead responsibility for checking the condition of drainage assets (watercourse and ditches), feeding information to the drainage condition and assets map and sharing information with the Land Drainage Partnership. [paragraph 7.8]

The Group recommend that each district council assess whether they have sufficient technical capability and if necessary ensure that a suitably qualified individual is available to advise District Planning Committees about drainage issues and flood risk implications for each development. [paragraph 7.37]

Drainage maintenance

The approach adopted by Wychavon and Wyre Forest, where officers proactively pursue and serve notice on landowners for not adequately maintaining watercourses, was seen as good practice. The Group feel that other Districts should be encouraged to adopt this approach. **The Group therefore recommend that all district councils should consider proactively making use of their powers to serve enforcement orders on landowners who do not comply with requests to maintain their ditches and/or water courses.** [paragraph 7.48]

The Group recommend that District Councils should develop an arrangement whereby if a riparian land owner can not afford or is unwilling to repair water courses, then under the Local Government Act 2000, they should carry out necessary work and where possible claim the cost of works back from the land owners or their estate. [paragraph 7.50]

Flood Risk Mapping

The Group recommend that the flood risk map should be produced by the District Councils and held by the County Council for every parish and urban area affected by floods, showing which properties and roads had flooded and the extent and direction of flow of flood waters. The District Council should carry out the mapping, with assistance from parishes. Information needs to be fed in to the County Council, and shared with members of the Land Drainage Partnership. [paragraph 7.17]

The Group recognise that this could involve much work especially for larger parishes, therefore, areas most prone to flooding should be prioritised first. [paragraph 7.18]

The County Council should co-ordinate sharing of the information on GIS maps, working in collaboration and sharing information with the Environment Agency. [paragraph 7.19]

Flash Flooding

A Lecturer in Physical Geography at the University of Worcester has recently carried out some research into predicting where flash floods might occur in the city due to surface water runoff during heavy rainfall. The conclusions appear promising and could be useful for raising public awareness.

The Group recommend that the Land Drainage Partnership considers this and other relevant research (as highlighted in the Pitt Review (Chapter 4) to find a practical cost effective way to model and map areas at risk from flash flooding. [paragraph 7.15].

The Group recommend that records of drainage maintenance carried out are also kept and routinely maintained and that, again, overall responsibility should rest with the County Council. [paragraph 7.20]

The Group recommend that the County Council, in collaboration with the District Councils, should consider maintaining an inventory of local

equipment held by local farmers which could be used in alleviating flooding and drainage problems either during a flooding event or as part of recovery [paragraph 7.27]

The Group recommend that the County and District Councils consider ways to improve advising both rural and urban householders of their drainage responsibilities, including details on the availability of grants as well as the consequences of non compliance. [paragraph 7.44]

The Group recommend that the County and District Councils develop protocols for sharing appropriate staff resources during recovery work after emergencies where appropriate. [paragraph 8.35]

The Group support the inclusion of developments with sustainable urban drainage systems in the Regional Spatial Strategy [paragraph 7.32]

PARISHES

One of the issues raised in the Pitt Review was the need for a door knocking flood warning system at a local level¹². Lists of vulnerable people should be kept along with named persons with responsibility for warning. We believe that parishes are best placed to carry out this kind of warning system in rural areas. **The Group therefore recommend that such a system should be explored further and incorporated into parish emergency plans where appropriate. [paragraph 5.29]**

In urban or non-parished areas, the possibility of existing neighbourhood watch areas taking on responsibility for warning the vulnerable should be considered. [paragraph 5.30]

The Group recommend that the County Council's Emergency Planning Team assists with the development of a blue print or toolkit, providing more than just a skeleton, for other parishes' emergency plans, with the aim of encouraging parishes to create their own emergency plans for use in appropriate circumstances. [paragraph 5.33]

It was acknowledged though that all parishes were different and that in some parishes, turnover could be quite frequent, so ways of ensuring information and knowledge were passed on were important, such as perhaps a dedicated annual meeting. [paragraph 5.34]

The Group recommend that parishes which have formed there own flood groups, consider incorporating, promoting and deploying flood resistant products as part of the work of the group. [paragraph 6.15]

The Group recommend that consideration be given to a greater utilisation of the local knowledge on road drainage and watercourses of Parish Lengthsman. Parish Lengthsman should be contacted wherever possible to advise the County Council drain clearance teams of main flooding problem areas. [paragraph 7.42]

¹² Pitts recommendation 61 is that the Environment Agency should work with local responders to raise awareness in flood risk areas and identify a range of mechanisms to warn the public, particularly the vulnerable, in response to flooding.

JOINT SCRUTINY TASK GROUP

The Group recommend that this Joint Scrutiny Task Group reviews the outcome of the insurance industry's proposal to agree common minimum information on flooding insurance claims which should be provided to flood victims in 12 months time. [paragraph 5.42]

It is clear that much good work has taken place during and after the flooding emergency. The Group have been impressed with how organisations are keen to improve any future response. In the absence of an overarching body being responsible for flooding issues the Group support **Pitts recommendations 90 and 91 which require upper tier local authorities to set up scrutiny committees to annually review arrangements for managing flood risk. The Group believe that this joint committee is best placed to carry out such a review at least after the first twelve months. The Group therefore recommend that this Joint Scrutiny Task Group be re-convened in 12 months time to review the outcomes from its findings and recommendations, as well as review progress on arrangements for managing flood risk. [paragraph 9.3]**

NATIONAL GOVERNMENT

There were also conflicts between DEFRA land management schemes such as Entry Level Stewardship (ELS) and Environment Agency schemes. For example, in the ELS scheme, points were awarded for clearing ditches less often to protect wildlife habitats than might otherwise be advisable by the Environment Agency. **The Group recommend that the Government should review its own policies to ensure consistency and alignment of policies and procedures. Alternative ways of minimising flood risk such as examining farming methods and land use should form part of the review. [paragraph 7.30]**

The Group recommend that the Government (DEFRA) produce national guidance to clarify the criteria for contaminated land. [paragraph 8.10]

In furtherance of Pitt recommendation No 32, the Group also recommend that the Government explores how it might legislate to increase control over water companies to prevent discharge of effluent into rivers. [paragraph 8.13]

The Group conclude that existing arrangements are unfair and that legislation is needed on how to treat flood debris after a flooding emergency. **The Group therefore recommend that the Government should:**

- **consider some form of compensation for landowners clear up costs; and/or**
- **consider creating some form of national labour force of using the Army to help with clear up of flood debris; and**
- **produce greater clarity on the circumstances in which it is appropriate for local authorities to provide clear up help to flood victims ie Wychavon provided skips for domestic waste but it was felt that legislation was needed to change the rules on trade waste. [paragraph 8.16]**

Public Advice

The Chief Executive of the National Flood Forum (NFF) told the Group that organisations needed to work more in partnership to produce multi-agency help and advice. She also believed that a public awareness campaign was needed to alert people to the risk of flooding and the need for household emergency plans, to include such things as grab bags containing a bank card, insurance documents and other necessities. Plans should also include arrangements for moving cars out of danger or caring for pets. The Group fully support this view and **Pitt's recommendation 60**: that the Government should implement a public information campaign which draws on a single definitive set of flood prevention and mitigation advice for householders and businesses, and which can be used by media and the authorities locally and nationally. [paragraph 5.1]

Although sandbags were often considered beneficial, the NFF did not support the utilisation of sandbags as they were not waterproof, required some kind of membrane to be effective and were difficult to use by vulnerable or elderly residents. Also they were difficult to dispose of after the event. The Group support this view along with **Pitts recommendation 26**: that the Government should develop a single set of guidance for local authorities and the public on the use and usefulness of sandbags and other alternatives, rather than leaving the matter wholly to local discretion. [paragraph 5.3]

When people are buying a house, they should be able to get advice on flood risk in the same way as they get advice on fire and crime risk. At present, a basic flood risk assessment can cost up to £1,000. The Group fully support **Pitt's recommendation No 63**, that flood risk should be made part of the mandatory search requirements when people buy property, and should form part of Home Information Packs. [paragraph 5.40]

Appendix 1

WORCESTERSHIRE FLOODS SUMMER 2007 Schedule of the Task Group's Activity

Joint Worcestershire Scrutiny Members Meeting – agreed to joint scrutiny	26 November 2007, 6pm
Joint Worcestershire Scrutiny Members Meeting – membership agreed	Monday 4 February 2008, 6pm
Proposal to OSSC – terms of reference agreed	19 March 2008
<p>Joint Task Group discussions with:</p> <ul style="list-style-type: none"> • National Flood Forum (2.30) • Local Media (3.30 approx) • Local Resident (4.30 approx) • Highways Agency (5.30 approx) • Parish Councillors (6.30 approx) 	31 March 2008
<p>Joint Task Group discussions with:</p> <ul style="list-style-type: none"> • West Mercia Police (2.00-4.00) • H&W Fire & Rescue Authority (2.00-4.00) • Local Resilience Forum (2.00-4.00) • Severn Trent Water (4.00 approx) • Environment Agency (5.30 approx) • Land Drainage Partnership (7.00 approx) 	7 April 2008
<p>Joint Task Group discussions with:</p> <ul style="list-style-type: none"> • National Farmers Union (2-4.00) • CL&BA (2-4.00) • Chamber of Commerce (4-5.00) • Worcestershire Partnership (5.30-6.30) 	28 April 2008
Discussion emerging findings	30 June 2008
Discussion on draft report	6 August 2008
Re-draft to stakeholders	22 August 2008
Final Draft discussed with stakeholders	6 November 2008
Report published and presented to County and District Scrutiny Committees	Autumn 2008

List of key documents consulted during the scrutiny

National Documents

- The Pitt Review final report (June 2008)
The Pitt Review - Section 8 Next Steps and list of recommendations – Implementation and Delivery Guide (June 2008)
http://www.cabinetoffice.gov.uk/thepittreview/final_report.aspx
- House of Commons – Environment, Food and Rural Affairs Committee – Flooding – Fifth Report Session 2007/08 (May 2008)
<http://www.publications.parliament.uk/pa/cm200708/cmselect/cmenvfru/901/90102.htm>
- Defra – Future Water – Government’s water strategy for England (February 2008)
<http://www.defra.gov.uk/Environment/water/strategy/index.htm>
- Environment Agency – Making Space for Water –(December 2007)
<http://www.defra.gov.uk/enviro/fcd/policy/strategy/innovfnd.htm>
- Planning Policy Statement 25 Practice Guide – Managing Surface water (June 2008)
<http://www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk>
- Environment Agency – River Severn- Catchment Flood Management Plan Draft (May 2008)
http://www.environment-agency.gov.uk/regions/midlands/1192964/2048445/?version=1&lang=_e
- National Farmers Unions’ response to the Environment Agency’s River Severn Catchment Flood Management Plan Draft (May 2008)
- Defra’s Consultation on promoting property-level flood protection and resilience (30 July 08 – 28 Oct 08)
<http://www.defra.gov.uk/corporate/consult/flood-protection/letter.htm>
- Fire and Rescue Service Operational Response to the Summer 2007 floods by Sir Ken Knight, Chief Fire and Rescue Adviser - Facing the Challenge (March 2008)
<http://www.communities.gov.uk/documents/fire/pdf/725360.pdf>
- The Association of British Insurers Summer Floods 2007: Learning the lessons (November 2007)
<http://www.abi.org.uk/BookShop/ResearchReports/Flooding%20in%20the%20UK%20Full.pdf>

- Environment Agency Flood Advice Guides – Includes what to do before during and after a flood and a best practice guide for parishes produced by Hampshire County Council
<http://www.environment-agency.gov.uk/subjects/flood/826674/882909/483622/?version=1&lang=e>
- The Water UK Review Group on Flooding - from the viewpoint of the water industry what lessons can be learned in the immediate aftermath of the floods of summer 2007.
<http://www.water.org.uk/home/news/press-releases/flooding-review-phase-1-4-feb-08/wateruk-review-group-on-flooding-phase-1.pdf>

Other Documents

- Hereford & Worcester Fire & Rescue Authority – Flood Scrutiny Report (May 2008)
<http://www.hwfire.org.uk/PDF/publications/floodScrutinyReportMay08.pdf>
- Post July summer floods debrief notes from Silver Control based in Worcester
- Agendas and Notes from Joint Scrutiny Task Group (November 2007 to April 2008)
<http://www.worcestershire.gov.uk/home/wccindex/wcc-mas/wcc-mas-dsu/wcc-cs-lads-scrutiny-floods-dates.htm>
- Severn Trent Water Authority – written responses to questions asked at 7 April Joint Scrutiny Task Group meeting (April 2008)
- Environment Agency – written responses to questions asked at 7 April Joint Scrutiny Task Group meeting (April 2008)
- Worcestershire County Council Cabinet Report and Appendices – Flooding within the County Summer 2007, (August 2007)
<http://www.worcestershire.gov.uk/home/wccindex/wcc-mas/wcc-mas-dsu/wcc-mas-committee-services/wcc-mas-minutes-committees.htm>
- Regional Spatial Strategy, Worcestershire County Council Officer's response
<http://www.worcestershire.gov.uk/home/wcc-planning-strategic-planning-regional-spatial-strategy-phase-3-revision>
- Worcestershire Land Drainage Partnership Meeting Notes, (October 2007) Worcestershire Land Drainage Partnership Meeting Agenda, (June 2008)

- Research recently carried out into predicting where flash floods might occur in Worcester due to surface water runoff, using readily available GIS systems, by Fleur Visser, a Lecturer in Physical Geography at the University of Worcester
- Worcestershire County Council - What can be done? What should be done? To minimise the impact of flooding on the people of Worcestershire - REPORT (December 2000)
http://www.worcestershire.gov.uk/home/wcc-cs-lads-scrutiny-reports-2000_flooding.pdf
- **Worcestershire Mental Health Partnership NHS Trust Board Report, (October 2007)**
- Worcestershire County Council response to Interim Pitt Review (March 2008)
- West Mercia Local Resilience Forum – Strategic Review -Summer Floods 2007 (December 2007)
- West Mercia Local Resilience Forum – Communications Plan (October 2007)
- Gloucestershire County Council – Copy of Head of Flood Alleviation Job Description
http://jobs.publictechnology.net/uploaded_file/file_name/17618/JD_for_HOFlood_alleviation_AJamends.doc

Other local authorities' scrutinies or work on flooding

- Malvern Hills DC Scrutiny Report – Review of the District Council's Response to Flooding Summer 2007 (draft discussed by Committee on 19 Feb 2008)
<http://malvern.whub.org.uk/home/mhc-about-cmma-panel-reports>
- Wychavon DC Scrutiny Report - Response to Flooding, December 2007
<http://www.ewychavon.org.uk/modern.gov/Published/StdDataDocs/2/7/2/0/SD00000272/OSFinalReport.pdf>
- Worcester City Scrutiny Committee Report – Note of Flash Flooding Review, 11 April 2007

Oxfordshire County Council's Flooding Scrutiny Scoping Template, November 2007

http://portal.oxfordshire.gov.uk/content/publicnet/council_services/about_your_council/improving_our_performance/scrutiny/scrutiny_reviews/Floods.pdf

- Gloucestershire County Council's Final Inquiry Report – Executive Summary and Recommendations, 21 November 2007
<http://www.gloucestershire.gov.uk/index.cfm?articleid=17502>

- **I&DeA Knowledge – Case Study - Nottinghamshire County Council – A Flood resilient County info document (March 2007)**
<http://beacons.idea.gov.uk/idk/aio/6086124>
- **Newark & Sherwood District Council – Community Resilience Leaflet**
<http://www.newark-sherwooddc.gov.uk/ppimageupload/holding/Image61382.PDF>
- **Beckford Parish Council – notes from public meeting concerning flood issues / newsletter (March 2008)**
<http://www.beckford-village.org/parishcouncil/index.php#>

Appendix 3
GLOSSARY

Acronyms	Meaning
ABI	Association of British Insurers
AWM	Advantage West Midlands
BBC H&W	BBC Hereford and Worcester (local radio)
CCA	Civil Contingencies Act 2004
COBR	Cabinet Office Briefing Room
Defra	Department for the Environment Food and Rural Affairs
ELS	Entry Level Stewardship (Defra)
EFRA	Environment Food and Rural Affairs
EA	Environment Agency
H&W FRA	Hereford and Worcestershire Fire and Rescue Authority
LDP	Land Drainage Partnership
LRF	Local Resilience Forum
LSP	Local Strategic Partnership
NFF	National Flood Forum
NFU	National Farmers Union
River Severn CFMP	River Severn Catchment Flood Management Plan
RNLI	Royal National Lifeboat Institute
STW	Severn Trent Water
SUDS	Sustainable Urban Drainage System
SWMP	Surface Water Management Plan
PPS 25	Planning Policy Statement 25 is about positive planning to deliver sustainable developments taking full account of flood risk.

Term	Explanation
Culvert	Drain, sewer or water course crossing under a road or embankment
<p data-bbox="235 409 472 480">Local Resilience Forum (LRF)</p> <p data-bbox="235 688 500 760">Gold Silver and Bronze Commands</p> <p data-bbox="235 1640 472 1711">Category 1 and 2 Responders</p>	<p data-bbox="560 409 1385 653">The LRF ensures partner agencies co-ordinate resources so they can respond effectively when emergencies or incidents occur. The Police lead during an emergency, using Gold, Silver and Bronze command structures. The LRF also exists to warn, inform, advise and educate the public about developments in the area of Civil Resilience. Membership is made up Category 1 and Category 2 responders.</p> <p data-bbox="560 688 1385 898">Gold Command Strategic decision makers at the local level. They establish the framework within which operational and tactical managers work in responding to and recovering from emergencies. Multi-agency co-operation at gold level is delivered through the Strategic Co-ordinating Group (SCG).</p> <p data-bbox="560 934 1385 1039">Gold Commander The most Senior Police Officer leading the strategic response to the emergency.</p> <p data-bbox="560 1075 1385 1285">Silver Command (or Silver Control) Tactical level of management introduced to provide overall management of the response to an emergency. Silver managers determine priorities in allocating resources, obtain further resources as required, and plan and co-ordinate when tasks will be co-ordinated.</p> <p data-bbox="560 1320 1385 1425">Silver Commander The Police Incident Commander at Tactical (Silver) Control, Chair of Silver Liaison Group.</p> <p data-bbox="560 1461 1385 1600">Bronze The level at which the management of 'hands-on' work is undertaken at the incident site or impacted areas. This is sometimes referred to as the 'operational level'.</p> <p data-bbox="560 1635 1385 1871">Category 1 Responder A person or body listed in Part 1 of Schedule 1 to the Civil Contingencies Act. These bodies are likely to be at the core of the response to most emergencies. As such, they are subject to the full range of civil protection duties in the Act. Examples of Category 1 responders include the emergency services and local authorities.</p>

	<p>Category 2 Responder A person or body listed in Part 3 of Schedule 1 to the Civil Contingencies Act. These are co-operating responders who are less likely to be involved in the heart of multi-agency planning work, but will be heavily involved in preparing for incidents affecting their sectors. The Act requires them to co-operate and share information with other Category 1 and 2 responders. Examples of Category 2 responders include utilities and transport companies.</p>
Flood resilience measures	These measures include, for example, water resistant floors plaster and paint, removable, light weight doors and placing electricity sockets higher up – these measures will help speed up recovery when flooding occurs.
Flood resistant measures	These measures are designed to keep water out of your home such as door barriers and airbrick covers, raising the floor level or the building construction prevents floodwater from entering.
Hublets	The hublets were flood advice centres established by Worcestershire County Council, District Councils and other key partners to provide support and information for members of the public. Hublets were located across the County in Upton-upon-Severn, Tenbury Wells, Sedgeberrow, Kemerton, Powick and Kempsey.
Riparian owner	Owner of land on the boundary of a river, watercourse or shoreline
<p>More information and advice on flooding can be found on the following websites:</p> <p>www.floodforum.org.uk (hosts the Blue Pages)</p> <p>Advice publications from the Environment Agency www.environment-agency.gov.uk/subjects/flood/826674/882909/483622/?version=1&lang=e?lang=e</p> <p>Floodline www.environment-agency.gov.uk/subjects/flood/826674/</p>	

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