

Summer 2007 Floods
Joint Scrutiny Task Group

Monday 7 April 2008, 2.00pm, County Hall
DRAFT Notes

Present:

Councillors:

<i>Worcestershire County Council</i>	John Cairns, Liz Tucker
<i>Bromsgrove District Council</i>	Peter McDonald
<i>Malvern Hills District Council</i>	Mike Biddle
<i>Redditch Borough Council</i>	Mike Chalk
<i>Worcester City Council</i>	Not present
<i>Wychavon District Council</i>	Martin King (Chairman)
<i>Wyre Forest District Council</i>	

Officers:

John Jordan	Democratic Services Manager, CC
Stella Wood	Overview and Scrutiny Officer

1. Welcome, apologies and introductions

Martin King welcomed everyone to the meeting.

Apologies were received from Fran Oborski (Wyre Forest District Council). Peter McDonald and Mike Biddle had to leave early (5pm and 5.50pm respectively).

2. Notes of last meeting on 31 March 2008

The notes had been drafted but not yet circulated to Members.

3. Discussions with:

- West Mercia Police
- H&W Fire & Rescue Authority
- Local Resilience Forum
- Severn Trent Water
- Environment Agency
- Land Drainage Partnership

As agreed at the last meeting, a number of individuals and organisations had been invited to discuss issues raised and as outlined in the agenda.

The Chairman outlined the format of the meeting for each attendee/s in turn, explaining how they would be asked to set out their views or experiences on the immediate response to the floods and recovery since, and whether there were any possible areas for improvement. This would then be followed by a general discussion with each group.

Details of those attending and the main points raised are set out as follows.

2-4pm

West Mercia Local Resilience Forum: Eamonn Croft, Coordinator

West Mercia Constabulary:

Chief Inspector Matt Mead and Steve Pooler, Emergency Planning Officer

Hereford and Worcester Fire and Rescue Authority:

Ray Rogers, Emergency Planning Officer

At the request of the Chairman there was a slight change to the order published in the agenda. Eamonn Croft was asked to briefly outline the role and purpose of the Local Resilience Forum (LRF), before Members heard from the Police and Fire & Rescue Authorities.

Responsibility for civil resilience, passed to local authorities after the second world war. It 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. The Civil Contingencies Act (CCA) 2004 now required organisations to work together in a more formalised framework. It came into force in November 2005. Organisations were divided into Category 1 or Category 2 responders. Category 1 included county and district councils, national and local health agencies, the blue light emergency services and the Environment Agency. Category 2 included the utilities and the Highways Agency.

Briefly, the Act required that Category 1 responders:

- Meet together in a Forum and cooperate together during major incidents
- A community risk register should be created and maintained
- Arrangements must be in place to warn, advise and inform the public.

The LRF first met in November 2006 and was currently chaired by the Chief Constable of West Mercia Police.

Information about the LRF (from their website) had been previously circulated to members. Their website provided information to the public and also acted as a communication channel for members.

In response to a question about the involvement of health authorities on the LRF, it was explained that the Midlands had one strategic health authority and 42 various health bodies. At present, there was one lead member from a Primary Care Trust on the LRF, and that was Simon Connolly (Herefordshire). There was also a representative from the Health Protection Agency (which provided support and advice on threats to public health).

The LRF met every 4 months and rotated round member organisations. However, during an emergency, the strategic lead, Gold Command, was always set up at Hindlip, as it had the necessary communications facilities.

Gold command made strategic decisions (eg to evacuate a large area) and communicated up to COBRA (national government).

Silver control made operational decisions (eg how an evacuation would be carried out).

Bronze command put those decisions into action (eg carry out an evacuation).

Membership and terms of reference for three silver groups had been established, one each covering Shropshire, Worcestershire and Herefordshire. Only in Worcestershire were conditions severe enough to warrant setting up a silver control on 20 July 2007.

Members were interested to know who could declare an emergency and how it was decided. It was explained that any Category 1 responder could declare an emergency. The criteria for doing so was when it reached a situation where it considered that it risked being overwhelmed by the events and the public were likely to be put at risk.

Category 1 responders also had the right to make their own decisions for example, whether to evacuate a local authority home.

During the June flooding event, silver control was established on the authority of a Senior Police Officer. The situation was less serious than the July event and did not warrant the setting up of gold command.

Membership of the Silver control included:

Police; Fire, PCT, City Engineer; Environment Agency; Worcestershire County, Malvern and Wychavon's District Council's Emergency Planning Officers; Highways Authority Officer, Health protection and a Hospital Manager.

Terms of reference for Silver Control included:

- Collation and dissemination of information
- Convening meetings to review and plan actions
- Managing media releases

As a matter of course, a de-brief was held after every event which examined what went well and not so well. In relation to communications, there had been problems with some 24/7 organisations communicating with non-24/7 organisations, inconsistent media messages and some confusion in the early stages.

To resolve these problems, the scrutiny task group was advised that a draft multi-agency communications plan had been agreed after consultation on 18 March and that this would be tested out. It had been agreed that each organisation would send in its press releases to silver control to try and ensure delivery of a common media message.

One of the main points raised previously by BBC local radio, was that it would be better able to fulfil its public information role if it could have a radio car outside silver control and receive communications direct from a single point of contact.

Members accepted that other local and national media had commercial and other interests but felt that the key point for any change was whether it would improve local response and the lives of residents rather than the needs of the national media.

Members were advised that this was understood although it had to be remembered there was a lot of pressure on silver control and that a media cell was attached to gold command which had responsibility for managing media messages to a wider audience.

Other communication improvements suggested was the creation of a single

generic email address for staff on silver control.

Representatives from Redditch Borough and Bromsgrove District Councils had been omitted from Silver Group as they were much less affected. However, it was felt that had they been included, they could have offered mutual assistance earlier.

Fire Service

Malcolm Weatherall from the Met Office joined their control room on 18 July and told them exactly how much rain would fall. They still could not have anticipated the unprecedented levels of flooding which led to them carrying out 1,185 rescues over 3 days. The July floods were not the worst case scenario. Had the same amount of rain fallen simultaneously in Wales then the floods could have been significantly worse.

One of the weaknesses identified in their reviews 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, help was received in Pershore from south coast rescue teams in and in Evesham from Merseyside and the RNLI. Another weakness was that there was no coordinated national system for receiving mutual aid. These points had been fed into the Pitt Review.

If the local Fire & Rescue Service was not able to cope with a large incident it would contact Government Office West Midlands who would identify mutual help.

Wychavon District Council had realised the situation was becoming serious and sent staff home early on Friday afternoon (20 July). In response to a question about triggers for establishing Gold Command it was explained that emergencies could either be immediate (eg explosion) or slow burning (eg spread of Legionella).

Senior Fire and Police Officers on Gold Command had been in contact with each other and the Met office in the afternoon, checking whether services could cope. At 6pm the call was made that the fire service risked becoming overwhelmed with incoming calls and it was decided to set up Gold Command. Only 3 members could physically get to Hindlip and they eventually met at about 8pm.

Members commented that rest centres had already been set up for stranded people in the districts at about 5-6pm and wondered what gold and silver command did that added to the alleviation of those suffering.

The emergency services had responded as best they could. A declaration of a state of emergency did not necessarily assist at an operational level although it was acknowledged that with the benefit of hindsight, there may have been benefit in establishing Gold Command earlier.

The closure of the M5 and M50 was one of the tipping points and the source of learning points. In future, to avoid thousands of stranded motorists, warnings should be less advisory and say "STAY AT HOME". The met office had warned 'Do not travel unless you have to' the day before, but it was the start of the summer holiday period and motorists still thought they would be safe to travel. The Environment Agency could predict river flooding but did not have the

modelling necessary to predict pluvial (run-off) flooding. It was one of the Pitt Review recommendations that the Environment Agency take on responsibility for this mapping.

The Police had very close contact with the County's Highways Authority and was very satisfied with the information received about road closures.

The deputy Managing Director of Wychavon believed it was he who had declared a state of emergency whereas the police advised that the trigger was that the fire service was no longer able to cope with emergency calls.

There had been some misunderstanding on the day. Wychavon believed it had a direct line into the LRF whereas the fire and police on the LRF believed that Worcestershire County Council represented the districts. This needed to be better understood by those on the LRF.

There was a 15 minute break from 5.20pm

4- 5.20pm - Severn Trent Water:

Peter Leatherland, Business Resilience Security Manager

Pete Leatherland did a presentation on the floods in Gloucestershire. The flooding of the Mythe treatment plant resulted in the loss of water supply to 150 thousand properties and 350,000 residents.

Mythe water treatment and pumping station had been built in 1870 and had never previously been flooded, demonstrating the unprecedented rainfall levels on 20 July.

This was a new scenario for Severn Trent Water. Their senior management had to be quickly briefed on the role and purpose of Gold and Silver Command before contact was made.

The works closed between 3-4am on 22 July. STW informed the public of potential water shortages but 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 and started filling baths and containers with water, quadrupling normal demand. One train of thought was that it might have been better to have delayed the information to prevent excessive consumption.

The Mythe treatment facility could produce 120 megalitres per day – it took 262 megalitres to fill the pipes and reservoirs in the system. Statutorily, water companies are required to supply 10litres per day per person for the first 3 days – there was currently no defined amount for longer periods.

Members highlighted the confusion of some Worcestershire residents in Bredon and Norton who did not know their water came from Mythe. Also, a number of residents in South Malvern were also supplied by Mythe and did not receive bottled water supplies.

The process of providing alternative supplies to all in need was being reviewed to try in an attempt to solve these problems for the future. Another problem had been where large water tankers could not get down narrow country lanes to fill bowsers and alternative provision was being sought.

Severn Trent water had 250 bowsers and had brought in additional ones from Scottish and Welsh Water. Members wished to know how many had been set up in Worcestershire and how much bottled water had been supplied to Worcestershire residents and when. This information would be sought.

In Gloucestershire, 11 sewage works and 40 sewage pumping stations had needed replacement equipment. Again Members felt that it would be helpful to know how many and which sewage stations and pumping works were affected by flooding in Worcestershire.

It was established that sewage would go directly into rivers in the event of sewage work failure.

In relation to Severn Trent Water's resilience it was explained that supplies could normally be diverted from other sources but that exceptionally, this was not possible at Mythe. If Strensham went offline, supplies could be backed up from other stations. The relationship between the Mythe and Strensham Treatment works was an area where further clarification could be sought.

The floods cost Severn Trent Water £25 - £30m and was offset by insurance. £3.5m had been allocated to benefit affected communities. Residents had been sent questionnaires and members asked to see an analysis of the responses.

Some houses had now been blighted by flooding from sewage. It was understood that if sewage was not removed residents should not have to fund the costs.

In relation to sewage on streets combined with flood water, Pete Leatherland believed it was Severn Trent's responsibility for the clean up of leakage from their sewers and he agreed to send details of their policy on this.

Severn Trent Water now had a dedicated representative to attend the 8 LRFs in their regions and were producing a leaflet showing key contacts for each area. Their crisis manual had been revised to show the role and purpose of gold, silver and bronze commands. Training was now planned for staff and directors. A dedicated team for recovery had also been established by Severn Trent.

It was established that Severn Trent Water had contacted Gloucestershire's Gold Command at around midnight (21/22 July) to advise that the Mythe plant would be flooded. The scrutiny task group were interested in cross boundary communications and wondered whether either STW or Gloucestershire Gold had contacted Worcestershire about the loss of supply.

An example of some of the main lessons learned were:

- When to form the crisis management team
- The need to review the adequacy of flood defences and
- The degree of water supply resilience.

In response to the question of whether Severn Trent had any plans to alleviate the effects of flooding in future it was explained that there was an ongoing project identifying sewage and water pumping stations most at risk from flooding. Investments would be prioritised where feasible solutions could be found.

Members requested the following further information:

- A list of STW assets considered at risk of flooding in Worcestershire and
- A map showing which properties received water from Mythe and which

received water from Strensham water treatment works.

Members were advised that it may not be possible to provide this detail as information sharing agreements between agencies were not yet fully in place. However, STW were expecting the government to change the rules on sharing information.

STW were investing in new IT systems and processes to more accurately measure water supplied and improve leak detection.

How were cross regional operational issues managed?

It was explained that there used to be an east west split from the Bristol Channel to the Humber Estuary but now the whole area was served by their Customer Operations Contact Centre in Coventry. There was a dedicated line for staff to ring in if there were problems and they could discuss crisis management needs when appropriate.

What was Severn Trent's rate of capital expenditure for the last financial year?

The Trading Statements for STW would be published on 5 June. Profits for 2006/07 were likely to increase.

The cost of flooding that year was between £13m - £17m

Did Severn Trent spend all of the planned capital expenditure in that year?

STW had spent all of the capital expenditure planned for 2007/08. For future years they had an ambitious investment programme to improve flood resilience in flood risk areas. They were required to consult OFWAT on their plans and they hoped OFWAT would look favourably on their plans.

STW were updating their records so that computer data would in future show all drains and pipes for which they were responsible.

Members considered that it might be helpful if maps could be produced and maintained to show which organisation was responsible for which pipes/drain in the county. The county council may be able to assist in this regard.

There was a short break for sandwiches at 5.25pm

5.40-7.00pm Environment Agency:

David Throup, Area Environment Manager and Anthony Perry, Area Flood Risk Manager West

The area covered by the Flood Risk Manager West extended from Powys to Chepstow and included the Severn, Teme and Avon rivers.

The Environment agency had various roles in relation to flooding including:

- Establishing emergency response rooms
- Providing flood warnings and advice to the public (the police had issued flood warnings before 1996) including how to prepare and cope before, during and after a flood
- Collecting flood data
- Using their assets to protect communities from flooding (eg redirecting water

by opening sluice gates)

- Checking and maintaining permanent flood alleviation barriers, embankments and other before an anticipated flooding event to ensure they are operating effectively
- Erecting temporary flood barriers
- Monitoring river levels and rain gauges
- Flood risk mapping of main rivers and ordinary watercourses, updating levels since July 2007. This did not currently include flooding from pluvial (run-off) or ditches. These issues were being considered in the Pitt Review.

It was emphasised that the Environment Agency had the 'power', rather than 'responsibility' to carry out works on main rivers to reduce flood risk. On occasions they did use their 'power' to remove obstructions from rivers.

Record levels of rain had fallen over the lower Severn catchment on 20 July, more than would be expected of a 100 year flood event. Conditions had been exacerbated as there was no soil moisture deficit (the ground was already saturated) so the run-off was as if from tarmac.

It was not possible to say whether increased rain fall was a result of climate change. Looking back at records (more like descriptions of flood events) it was clear that similar events had occurred over time from the 1700s. It could therefore just be the climate was going through a wetter period.

On Thursday 19 July the Environment Agency issued a press release about the expected levels of rainfall and issued 6 severe flood warnings including the Pershore, Sedgeberrow and Hinton areas. The Environment Agency's gauge on Cleeve Hill showed 136mm in 24 hours. The highest recorded rainfall total was 157.4 mm in 48 hours at Pershore College (Worcs) although this was not the Environment Agency's gauge and it was understood to have been later corrected.

Since the event, the Environment Agency had held over 30 drop in sessions for the public.

A workforce was carrying out pioneering work on smaller urban watercourses.

There was a myth that water channel (or ditch) clearance was a solution. In some instances this was not recommended as it could make flooding worse for a community downstream. The wider catchment area needed to be considered as a whole.

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, including Pershore, Lower Wick and Kempsey in Worcestershire. Anthony Perry agreed to send a full list.

Flood risk could be alleviated using temporary, de-mountable or permanent barriers. Temporary barriers had to be stored, transported and erected on site such as those used at Upton and on Hylton Road. De-mountable barriers were more engineered and had permanent posts in place into which planks were slotted, like in Bewdley.

Funding had now been raised through local levy for the building of a permanent embankment to protect Hylton Road in Worcester. Work was expected to start in

the summer. The possibility of a de-mountable barrier was being considered for Upton.

Given that exceptional rainfall had been forecast by the Met Office and flood warnings issued by the Environment Agency, Members wished to know why the temporary barrier at Upton had not been erected on time in July.

The Environment Agency explained that there were a number of reasons, including that the Upton barriers were part of a trial to test out the effectiveness of such barriers. There had been initial concerns about seepage but there had not been a problem.

Whether to invest in a storage facility closer to Upton was being considered as part of the trial. It was felt it would not have been prudent to build such a facility before it was known whether the barriers would work.

The barriers were stored in a depot South of Kidderminster. The workforce that erected the barriers lived largely in the Kidderminster and Tewksbury areas and only some of these could get to Upton on 20 July. Water level triggered the erection of the barriers and judgements were based on how long it had taken to erect the barriers 5 times previously. However, the Severn had had an unprecedented rate of rise and even though the transport lorries had a police escort, they still could not get through by road and had to be abandoned.

Perhaps most importantly, even if the barriers had been erected, the water levels would have breached the temporary barriers.

The trial would end when there was a situation where water reached levels where the barriers protected properties from flooding successfully.

Dredging

The Chairman recalled how twenty years ago, the River Avon had been 4' deep in places which were now only 18" deep. 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. There were other more cost effective ways of reducing flood risk.

Building on flood plains

District council planning authorities would contact the Environment Agency for advice on applications for developments on flood plains.

However, there was an example in Wychavon, where a planning committee had received an application for a large glass house development in an area which had suffered from surface water flooding in July. The planning committee members were worried that the large development could cause further significant surface water run-off, but were told by officers that they could not turn down the application on possible flood risk grounds as the Environment Agency had not made an objection.

Members were advised that PPS 25 (the government's Planning Policy Statement 25: Development and Flood Risk)¹ strengthened the requirement to carry out a flood risk assessment in some cases for surface water run-off (pluvial flooding) and advice from the Environment Agency may be helpful.

The Environment Agency produced updated flood zones maps every quarter. The Environment Agency produced booklets for the public on flood resilience. They could also provide a cost benefit analysis on whether it was worth installing flood alleviation measures, for example, whether it would be worth raising the floor levels of houses in Diglis.

The Environment Agency had a general supervisory role in all matters relating to flooding. If a local authority was refusing to investigate an issue then the Environment Agency could look into it. If a local authority had investigated an issue but decided to take no action, the Environment Agency had no powers. It was recognised in the Pitt Review that these powers were not well defined.

**7-8pm Land Drainage Partnership:
Ian Bamforth, Service Leader to Highways and Countryside Division,
Worcestershire County Council and Steve Jorden, Director of Environmental
Services, Wychavon DC**

Worcestershire was keen to improve to address the drainage issues highlighted in the Pitt Review. The Worcestershire Land Drainage Partnership was formed to address those key issues such as how the organisations can further work together to identify improvements that can be made to the county's network of watercourses, ditches, drains and culverts.

Some ditches by the highway could still sometimes be the responsibility of the riparian land owner. Where a stream passed through a culvert underneath a highway for which the County Council was the highway authority, then the Council was the responsible authority for the watercourse.

Some parishes felt they had been left to negotiate (sometimes unsuccessfully) with local land owners 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, but no powers to force. It was felt that a test case was needed.

The floods had provided a real focus for authorities to examine land drainage issues. The Environment Agency and local authorities needed to do more to manage surface water drainage problems. Promoting alternative ways of minimising flood risk such as examining farming methods and land use as well as good maintenance of ditches should be part of the work plan.

Building designs could also minimise run-off by incorporating features such as a grass roof and sustainable urban drainage systems (SUDS).

The Land Drainage Partnership had developed a land drainage issues matrix to show the effects of various policies and procedures of different organisations. For example, some of DEFRA's countryside stewardship scheme could conflict with

¹ The PPS25 was first published in December 2006, and aims to ensure that flood risk is taken into account at all stages of the planning process to avoid inappropriate development in areas at risk of flooding. Where new development is exceptionally necessary in such areas, the policies aim to make it safe without increasing the risk elsewhere and where possible reducing overall risk.

the Environment Agency's land management policy. There needed to be consistency and alignment of policies and procedures.

How land owners reacted to requests to maintain ditches and watercourses varied. Some were very willing; others weren't so keen, particularly if jobs were very large and/or costly. Some did not know their riparian responsibilities and others took the view that they paid taxes and the council should ensure roads had adequate drainage.

Recent floods accentuated the need to understand more effectively the extent of drainage issues across the county. The County Council had allocated an additional £5m to improving highway drainage over the next 2 years. A scoping exercise has been completed by officers detailing over 700 drainage improvement issues. A spreadsheet has been completed to prioritise improvement works and clarify estimated costs.

There would be benefit if STW could focus on two main issues:

- Reducing illegal connections to the infrastructure causing sewage backup/surge and water run-off into drains. Systems were often built to cope with 30 dwellings and now had 300 connected. A review of design criteria was needed to enable the systems to cope with incremental development
- Invest to solve the problem of pumping stations cited on flood plains becoming unusable during floods.

In terms of moving forward there was a view that the level of engagement amongst District Councils across the County varied. The approach adopted by Wychavon and Wyre Forest were seen as good practice. Other Districts should be encouraged to adopt this approach.

The Chairman thanked those attending for their time and informative and useful discussion.

The meeting ended at 8.00pm