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Cllr V Smith  
"Cherry Trees"  
Station Lane  
TEWKSBURY  
GL20 5DB

Dear Mr Smith

**Re: Flooding at Tewkesbury**

Further to our recent communications, I thought I should write in order to give you my thoughts on your recent report and the consequences on flood levels at Tewkesbury following the 20 July storm of 2007.

Firstly I found your report extremely helpful and informative. It contains a considerable amount of well researched and highly local information on the consequences of historical floods in the Tewkesbury area and provides an interesting comparison with the July 2007 storm: often the kind of detailed information that you and Mr. Witts have collected is not available to assist in understanding the nature of a given flood incident in the form of a forensic analysis. I am presently reconstructing the actual storms that occurred in June and July of last year and paying particular attention to the Lower Severn and Tewkesbury. Your report provides some very helpful information on this area and I am very grateful to you for sending me a copy.

I would make the following comments:

- (i) It is very clear that Tewkesbury is rather uniquely placed in terms of fluvial flooding and suffers from flooding from both the River Severn and the River Avon. It is extremely difficult to defend the town in any strategic sense without having a major impact on the attractive environment that draws people to live there. The historical flooding, which is traditionally associated with Tewkesbury, is flood plain inundation owing to these large rivers going out of bank. Unfortunately Tewkesbury is also affected by the tidal limit on the River Severn which had an impact on the 20 July event, occurring as it did during a spring tide period.
- (ii) The Environment Agency only has a duty to assess floods on a main river and was not given the powers to consider pluvial flooding at the time it was established as an agency of government. Unfortunately Tewkesbury is located on Gloucestershire soils which are relatively impermeable and consequently suffer from extensive pluvial flooding. This flooding, as you rightly mention in

your report, is not considered in any formal flood risk assessment carried out as part of a planning application. In the case of the 20 July event, there is considerable evidence of the major impact of pluvial flooding. This has always been so in Gloucestershire - and always will be so - given the nature of the soils. Consequently any flood risk assessment for planning purposes will be significantly affected by the absence of a detailed pluvial flood analysis. The differences that exist between your own reported findings and those of the EA may well be in part due to the current lack of focus on pluvial floods. It is likely that the Pitt Review will seek to correct this deficiency.

- (iii) Having looked at your analysis of maximum levels occurring in Tewkesbury during the 20 July event, it is clearly apparent that your own estimates of a maximum peak level of 14.2m AOD in comparison with the EA estimate of 12.92m AOD (obtained at the Mythe Gauge) provide considerable uncertainty in terms of the flooding potential that could impact the residents of Tewkesbury. In my view, it is imperative that the maximum levels are agreed independently since they will have such a dramatic influence on current and future building plans for the town and the surrounding area. My own view at this time is that the Mythe Gauge was overwhelmed for some time during the period of the 20 July flood and that the 12.92m AOD level may not reflect the severity of the event. This is clearly evidenced by the fact that the TBM level in the street outside the Bell Hotel (recorded by the Ordnance Survey at 13.4m AOD) was, from your photographic evidence, clearly inundated. This was not, in my view, pluvial flooding but was fluvial flooding from the flood plain of the River Severn. Therefore I would advocate that responsible authorities should examine this situation with some urgency. The consequences for current and future building plans are obvious and I cannot understand why Tewkesbury Borough Council has not taken a clear lead on this matter following the summer floods of 2007. The responsibility is clearly theirs, as are the consequences of inadequate guidance in terms of new developments.

Again I thank you for sight of your report and shall stay in touch as our own modelling work develops. I hope you are able to resolve the situation regarding the maximum water levels and if I can be of any help, then please contact me again.

With kindest regards.

Yours sincerely



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