

**COMMUNITY PARTNERSHIPS
OVERVIEW AND SCRUTINY PANEL**

**FLOODING & SUSTAINABLE PLANNING
TASK & FINISH GROUP**

REPORT AND RECOMMENDATIONS

JANUARY 2011

1. INTRODUCTION

This group has been conducting a review of Wokingham Borough Council's flooding and sustainable planning policies since October 2010, and also called on witnesses from the Environment Agency, Thames Water, the Loddon Valley Residents' Association, Wokingham Borough Council and the Executive to give a wider view as to the policy area.

2. BACKGROUND

2.1 Membership of the Flooding & Sustainable Planning Task & Finish Group

Councillors Tim Holton (Chairman), Phil Challis, Norman Gould and Emma Hobbs.

2.2 Terms of reference

2.2.1 To find out previous work on the issue of flooding undertaken by Wokingham Borough / District Council.

2.2.2 To investigate previous measures taken on flooding, other potential solutions to flooding problems and their effects.

2.2.3 To research the impact of sustainable policies and investigate other potential solutions to flooding problems and their effects.

3. RECOMMENDATIONS

3.1 The Flooding & Sustainable Planning Task & Finish Group recommends that the Community Partnerships Overview and Scrutiny Panel approves the recommendations of this report. The matter will then be owned by the Community Partnerships Overview and Scrutiny Panel (or successor body) to ensure that progress is being made on the matters highlighted below (Paragraph 5.1).

3.2 As the Lead Local Flood Authority (LLFA), Wokingham Borough Council (WBC) is to run twice-yearly workshops involving Thames Water (TW), the Environment Agency (EA),

- local flood action groups (e.g. Loddon Valley Residents' Association (LVRA)), the WBC Drainage Team and other interested parties and the relevant regional and national bodies, at which WBC's aims and objectives should be stated and relevant co-ordination undertaken (Paragraphs 4.1.1, 4.1.2 and 5.7).
- 3.3 Bi-annual reports (twice yearly) are to be submitted to the Community Partnerships Overview and Scrutiny Panel (or successor body) in September and March, to commence September 2011. These reports will form part of the feedback of the various bodies at the events detailed in Paragraph 3.2 (see also Paragraphs 5.1 and 5.8).
- 3.4 WBC is to investigate the expansion of the LVRA model across the area, and the potential to offer financial / logistical support to such bodies as part of 'the Big Society' policies being adopted by National Government (Paragraphs 4.2.9 and 5.2, Section 4.3).
- 3.5 That the Drainage Manager must always be supported by a dedicated assistant (Paragraphs 4.2.9 and 5.3).
- 3.6 A comprehensive database is to be compiled on land ownership and flooding incidents before 2015. This will also offer a clear outline for responsibility with regards to flooding and will be used to inform the relevant parties on the matter. Drainage responsibilities to be clearly highlighted on an appropriate map. (Paragraph 5.4 and 5.8).
- 3.7 The Borough / Parish Working Group is to receive an annual monitoring report on flooding incidents in the Wokingham Borough Council area. This will also discuss any actions which Town and Parish Councils are willing or able to take on the matter (Paragraph 5.5).
- 3.8 WBC to commit to a maintenance schedule of drainage assets across the area under its jurisdiction, to be operational by April 2012. A draft maintenance schedule of drainage assets to be presented to the Community Partnerships Overview and Scrutiny Panel in September 2011.

- 3.9 A Borough Flood Plan must be developed, with Departmental responsibilities for flooding and sustainable planning to be clarified within WBC, and the detailed actions to be taken before, during and after a flood event. The Development Department is to enforce WBC policies with developers and will outline their funding responsibilities for flooding and sustainable planning (Paragraphs 4.1.1 and 5.6).
- 3.10 The added cost of assuming LLFA responsibility is not to be raised by taking funding away from the drainage budget. WBC will also acknowledge the importance of LLFA and adopt appropriate policies (Paragraphs 4.1.1 and 4.1.2).
- 3.11 WBC's Development Control team to use mechanisms such as S106 agreements and Community Infrastructure Levy to obtain funding from developers for the long term maintenance (20 years) of the drainage assets implemented as part of the drainage strategy for the development (similar to long term funding for play areas) (Paragraph 4.4.7).
- 3.12 WBC Development Control to use Grampian planning conditions to ensure that developments can proceed only after an acceptable drainage strategy was in place and in all cases to offer surety regarding implementation of the Thames Water approved drainage strategy before development can begin (Paragraph 4.5.4).
- 3.13 In order to fulfil its responsibilities with regards to flooding, WBC, as lead flooding authority, asks that the Environment Agency must provide accurate flood zone map and that they make these maps available to the general public on their website as the EA have a responsibility to the general public for providing to the best of their knowledge, accurate information'.
- 3.14 Flood models are notoriously variable. In order to reduce the risk of flooding that a new development may pose (to both new and existing properties), development control must not use the information from the Environment Agency as the absolute determinant of whether a development should be granted planning permission. Additional sources of information: local experience, resident knowledge, Thames Water's expertise and other sources of relevant information must be considered and utilised in the decision making process. Evidence of the

inclusion of this information and the weight that was applied to it, must be evident in the planning process. Evidence is also required of the communication between the interested parties in any application, including residents and the Environment Agency, and the information gathered in this process.

4 REPORT

4.1 National & Local Policy Context

- 4.1.1 The Flood and Water Management Act 2010 has given local authorities greater power in the policy area, establishing them as LLFAs. The Environment Agency will have a strategic overview role for all flood risk in England, whilst house builders and developers will be required to place sustainable drainage systems in new developments.
- 4.1.2 LLFAs will also be required to consult with all relevant authorities to establish local flood risk management strategies, and can demand information from any party (with sanctions permissible if this is denied).
- 4.1.3 Under the Flood Risk Regulations 2009, WBC is to complete a preliminary flood risk assessment by June 2011. This will evaluate past and future flood risks and vulnerable areas. In addition, a strategic flood risk assessment is expected to be completed in the spring of 2011.
- 4.1.4 A surface water management plan is also being undertaken in the greater Reading area, with Reading Borough Council the lead authority on this project. WBC is also undertaking a Water Cycle Scoping study with the 6 Blackwater authorities (Hart, Surrey Heath, Rushmoor, Bracknell Forest, WBC and Guildford).
- 4.1.5 In January 2010, WBC adopted the Wokingham Borough Core Strategy. This is the blueprint for development for the period 2006-2026. Policy CP1 includes sustainable development and flood risk criteria with which development proposals must be in accordance.

4.2 Information Gathering – 2001 Flooding Review

- 4.2.1 The 2001 review had requested an increase in the highways revenue budget of £100,000 per annum. However, this had not been forthcoming; despite this, WBC officers were confident that

this had not caused flooding issues. Grills were checked when storms were expected, problematic gullies were cleared twice a year and ditches were most frequently the responsibility of the landowner.

- 4.2.2 The 2001 recommendation to agree the priority system had seen some action taken. All properties reporting flooding problems had been investigated by WBC's consultant with relevant action taken. Manholes were being recorded on a mapping system, and additionally approximately 29,000 gullies had been mapped. However, the responsibility for clearing ditches remains a controversial area.
- 4.2.3 Regarding the recommended list of possible major Flood Alleviation Schemes, WBC had been working on this list since the autumn of 2000. Many of these schemes were associated with rivers and were thus the EA's responsibility.
- 4.2.4 On developments on flood plains, planning applications were assessed with reference to WBC's flood plans. The current guidelines for planning applications were followed, and WBC had to report back on any applications agreed against EA advice. A Flood Plan that pulls together an integrated WBC response plan to a flooding incident as proposed by the 2001 Select Committee has not been created. However some elements required in a Flood Plan have seen some action (e.g. a sandbag distribution protocol available on the WBC website (Paragraph 4.2.5)). It was noted that the Highways Maintenance Management Plan also referred to flood incidents and was being updated. Action had been taken in anticipation of the 2007 flooding after an EA warning.
- 4.2.5 The development of a flood plan had seen some action, with a sandbag distribution protocol available on the WBC website. The Highways Maintenance Management Plan also referred to the response to flood incidents and was being updated. Action had also been taken in anticipation of the 2007 flooding after an EA warning.
- 4.2.6 Cross-departmental working within WBC had the potential to be improved by Wokingham Direct; whilst no major flooding incident had occurred in their time, their work on the severe weather of

2010 provided an example of their ability to co-ordinate and inform the public.

- 4.2.7 With regards to the requirement for developers to provide drainage strategies in proposals, WBC worked with developers to ascertain if their plans were appropriate. The Flood and Water Management Act 2010 also necessitated the establishment of a Sustainable Urban Drainage System Approval Body.
- 4.2.8 The locations of highway drains were being recorded on WBC's geographical information system, although this was a lengthy process and had yet to be completed. The 2001 review's call for a specialist team or consultant to be assigned this role had not been enacted.
- 4.2.9 On liaison and co-operation with Town and Parish Councils, a number of such bodies had been visited by WBC officers, requesting information on flooding hot spots. However, the situation on working with Thames Water on twice-yearly meetings was unclear, although greater partnership work with EA was being undertaken. In addition, the raising of the public profile on flooding issues and terminology had been largely neglected, with the Drainage Manager having recently lost his dedicated assistant. It was suggested that local voluntary groups could be used to assist in these tasks.

4.3 Information Gathering – Loddon Valley Residents' Association

- 4.3.1 LVRA had been established in early 2009 as a reaction to the increased number of flooding incidents in the area and the apparent lack of response. Although pluvial flooding was identified as the main cause, some fluvial risk was also present.
- 4.3.2 Various suggestions as to how to minimise these problems had been given, including ensuring that the flow of rivers was unimpeded, not placing developments on flood plains or removing flood storage facilities, maintaining flood assets and developing / enforcing a flood alleviation scheme. However, the EA had indicated that a flood alleviation scheme for the area would not be cost effective.

- 4.3.3 Given the predominance of pluvial causes for flooding, the maintenance and upgrading of flood assets was being prioritised. Given the predominance of pluvial causes of flooding, LVRA stressed that their priority was to see the maintenance and upgrading of flood assets. However, the ownership of these was proving to be a contentious matter, with WBC, Earley Town Council, Thames Water and riparian owners being amongst those involved in this matter.
- 4.3.4 Woodley and Winnersh were more prone to fluvial flooding, with areas around the Emm being subject to greater volumes of run off water given a number of developments in the Emmbrook area. Whilst Earley and Lower Earley were mainly at risk from pluvial flooding some homes were located in flood zone 1 (lowest) and were therefore at some risk of fluvial flooding. Suggestions on how to manage this included ensure that the rivers flow is unimpeded, not developing the flood plains and removing flood storage, maintaining flood assets and flood alleviation scheme.

4.4 Information Gathering – Environment Agency

- 4.4.1 The EA is responsible for the Thames Catchment Flood Management Plan, providing a flood risk overview for the area. This is intended to give a plan for sustainable flood risk management over the next 50 to 100 years; the WBC area is categorised as Sub Area 1 (Towns and Villages in Open Floodplain).
- 4.4.2 Given budget reductions, the Thames and Southern regions were due to be merged by April 2011. A further complication had been the previous system, which could render communications between local authorities and bodies such as the EA difficult and also leave lines of responsibility unclear. However, since the Pitt Review of 2007 and the transposition of the EU Directive on Flood Risk into British Law, the EA's role as a statutory consultee within the planning process for some developments within flood plains had been clarified to an extent. The example of joint working between WBC and EA on Sylvester Close had provided a positive template for future work.
- 4.4.3 Whilst the Flood and Water Management Act 2010 had clarified some matters, the fact that it had been implemented quickly by a

Government which has since been replaced meant that it was subject to change. In addition, the incoming Coalition Government may implement its own policies which could have an impact. However, at present the EA was responsible for developing, publishing, maintaining and monitoring a national strategy. In addition, it would work with LLFAs on flood and coastal risk management functions, and replacing Regional Flood Defence Committees with Regional Flood and Coastal Committees, which would then approve regional work programmes.

- 4.4.4 The EA's role is to cover river flooding, with surface water not their direct responsibility; however, it dealt with pollution issues arising from this and it was impossible to stick to its remit in its purest sense. The EA also had responsibilities within the Water Framework Directive, although the exact impact of these on the EA was unclear. On pluvial water, the EA would comment on water drainage issues but only act in relation to defences or any potential impact on fluvial issues.
- 4.4.5 The EA used 1/100 events to estimate flood capacity requirements; these also included an estimated rise to consider the potential impact of climate change. The EA could advise on sustainable drainage systems, but was only in charge of maintenance; it did not have the power to revisit sites.
- 4.4.6 Flood plain maps were highlighted as a concern; whilst they were often portrayed as distinct areas, this was not the case. Firstly, they were uncertain, as they were based on estimates. Furthermore, a development placed several metres outside an allocated 'flood plain' was by no means exempt from a high level of risk. Maintenance in flood plains was a shared responsibility, with the EA taking charge of balancing ponds; however, these were losing popularity as they could prove to be a liability in some circumstances. In addition, the Task & Finish Group raised concerns about discrepancies between the EA website map and the more detailed information available for a fee upon request.
- 4.4.7 Another issue was that the EA expressed an interest in the design of sustainable drainage systems but not their long term maintenance. This may cause problems with their sustainability.

4.5 Information Gathering – Thames Water

- 4.5.1 Under the Water Industry Act 1991, Thames Water (TW) had been put in charge of handling sewage matters; however, the Flood and Water Management Act 2010 may give them additional responsibilities for flood water. Sewers had three varieties; foul water sewers (pure sewage), surface water sewers (rain water / clean household water) and mixed (few in number, usually found in older buildings).
- 4.5.2 Proactive TW work consisted of planning and prevention, whilst reactive work consisted of engineering responses. Public sewers encountering problems saw a response within 5 days, although this would not include removal, drying out or landscaping.
- 4.5.3 There had been 215 operational flooding incidents in the last 4 years, spread on a relatively even basis; 90% of these had been caused by blockages. In the last 3 years, there had been 64 incidents involving a surfeit of water; however, 58 of these occurred as a result of the July 2007 flooding.
- 4.5.4 TW felt that it had good relations with WBC and that they were invited to comment on all relevant planning applications. Flows of water can be referenced by TW using Ordnance Survey maps, with relevant information being used to advise WBC on potential issues. TW generally comment that a drainage strategy is required.

TW do not have the power to refuse to connect new properties to its system, or stop new property development. However TW can seek WBC Development Control's support to invoke a Grampian planning condition, whereby development could proceed only after an acceptable drainage strategy was in place and implemented. There was some doubt as to whether TW were being consulted by WBC about the implementation of agreed drainage strategies.

- 4.5.5 TW is funded for five year periods, with the current tranche running from 2010 – 15. There were no planned flood relief projects for this time, although Crowthorne and Lower Earley were being studied for possible action in 2015 – 20. TW had moved from using 1/30 events to 1/20 to measure risk. WBC was

currently working on Preliminary Flood Risk Assessments to assist TW in its work on Sewage Water Management Plans.

5. CONCLUSIONS

- 5.1 The 2001 Report of the Select Committee on Flooding included much good analysis, and many of its findings remain valid. However, the Task & Finish Group raised concerns about the comprehensiveness and delay in delivery against the recommendations. It concluded that there had been a lack of monitoring of the progress of the implementation of the recommendations in a structured way.
- 5.2 With WBC now assuming greater responsibility for the policy area given its status as LLFA, an increased emphasis on following up the work undertaken on these matters will be imperative.
- 5.3 The example of the Loddon Valley Residents' Association, which has had a great impact in a short time under the leadership of Phiala Mehring, was noted by the Task & Finish Group. As the imminent Localism Bill may well have a strong emphasis on increased community involvement within local Government activity, this case study provides a model that WBC may wish to encourage and promote in other areas.
- 5.4 The work of Eddie Napper as Drainage Manager was also commented upon by Members, who feel that his contribution as an individual has been invaluable in making progress. However, to support him (or his successor) in his task, officer support will be imperative.
- 5.5 The position of WBC as LLFA will put the Council in a position to clarify the responsibilities of individuals and organisations, both within WBC and external partners / agencies. However, for this to be used to the maximum benefit of all parties, information must be kept and maintained in as comprehensive and accurate a fashion as is possible, with regular monitoring to ensure its continued validity and applicability.
- 5.6 The Borough / Parish Working Group is organised to ensure that communications between WBC and Town and Parish Councils are as clear as possible. Given the willingness of many Towns

and Parishes to contribute to the work of local Government, and the possible increased emphasis on them under the aforementioned Localism Bill, there may well be room to expand their work in this policy area.

- 5.7 Flooding and Sustainable Planning are policy areas with significant implications across a range of WBC Departments. A co-ordinated strategy within the Council is pivotal in resolving the myriad of related issues.
- 5.8 In the WBC area, pluvial rather than fluvial water is the cause of the majority of problems although fluvial water concerns remain, particularly in Earley and Lower Earley. However, the role of the EA is still important; the LLFA status of WBC provides the Council with an increased imperative to review the work of the EA.
- 5.9 As LLFA, a systematic approach is required to ensure that good ideas are followed through. Previously, some valid suggestions have been made but have lacked reinforcement; in addition, the responsibilities of developers (particularly in the area of drainage) have not been stated with sufficient clarity to make certain that they are undertaken.

6. ACKNOWLEDGEMENTS

The Task and Finish Group would like to thank the following for their contribution to the review:

ENVIRONMENT AGENCY

Bryan Roberts
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WOKINGHAM BOROUGH COUNCIL

Cllr Gary Cowan
Matt Davey
Jim Dunning

Eddie Napper
Ed Rehill
Cllr Angus Ross

7. GLOSSARY

'1/100 calculated to be the level of { [HYPERLINK "http://en.wikipedia.org/wiki/Flood" \o "Flood"](http://en.wikipedia.org/wiki/Flood) } water expected to be equalled or *Events*' exceeded every 100 years on average. 1/20 and 1/30 events are the equivalents for 20 and 30 year intervals.

Community Infrastructure Levy An alternative mechanism to a S106 agreement, for securing contributions towards infrastructure to mitigate the impact of new development but based on a tariff system rather than the impact of the specific development.

Fluvial Flooding caused by the action of a river or stream

Grampian Condition A Grampian condition is a planning condition that secures off-site works on land not controlled by the applicant.

LLFA Lead Local Flood Authority: a new responsibility created under the Flood and Water Management Act 2010, to be assumed by Wokingham Borough Council

Pluvial Flooding caused by extreme rainfall

S106 agreement A legal agreement under S106 of the Town and Country Planning Act, usually between a planning applicant and the Local Planning Authority, which secures financial contributions and/or works required to mitigate the impact of a development on local infrastructure. The contributions must be directly related to the impact of the specific development.

SUDS Sustainable Drainage Systems: designed to reduce the potential impact of new and existing developments with respect to surface water drainage discharges.

8. APPENDIX – THE 2001 REPORT

WOKINGHAM DISTRICT COUNCIL

REPORT OF THE SELECT COMMITTEE ON FLOODING



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WOKINGHAM DISTRICT COUNCIL

REPORT OF THE SELECT COMMITTEE ON FLOODING

1. Executive Summary

- 1.1 This Report outlines the findings of the Select Committee on Flooding which sat between 14 June and 2 October 2001. This report has been agreed by all of the Members of that Select Committee.
- 1.2 The Select Committee had been set up in response to flooding which took place in Wokingham District during the Autumn/Winter of 2000. It was not intended to be critical of individuals or agencies, but it was the wish of the Select Committee to develop constructive and positive actions which could be adopted in the future by the Council and others.
- 1.3 The Members recommend the operation of this Select Committee to the Overview & Scrutiny Committee as a model of good practice.
- 1.4 The Select Committee consulted widely with local communities as well as with the emergency services, key public agencies, government departments, experts and other interested parties. Its key recommendations that the Council should:
 - 1.5 enhance **preventative** protection against flooding through the use of planning policy, improved maintenance and remedial action. The latter two will require an increase in budget provision of £100,000 per annum to begin to deal with problem locations which are the responsibility of the Council. The capital budget will need to address more significant flood alleviation schemes;
 - 1.6 enhance protection against flooding through **joint actions** with partners, statutory agencies, land owners and others. This includes listening to local knowledge and engaging Town & Parish Councils in action;
 - 1.7 **raise awareness** among the public, Members and those affected by flooding over responsibilities and actions which they may take to minimise flood risk and/or the effects of flooding.
 - 1.8 improve **contingency plans** to ensure better preparedness for the impact of flooding;
 - 1.9 to raise awareness (1.7), joint actions (1.6) and contingency plans (1.8) will cost an additional £42,500 p.a.; and
 - 1.10 **lobby** those in government and elsewhere to revise funding mechanisms and amend Planning Policy Guidance.

2. Membership of Select Committee

- 2.1 This Select Committee was constituted under the pre-existing Committee arrangements prior to the introduction of the present Cabinet and Scrutiny structures. Members were Simon Etheridge (Lead Member), Mr. CER Clacey, Mr. RH Cundy, Mrs. ANMC Drake, Mrs. PE Helliard-Symons, and Mr. TD McCann.
- 2.2 The Select Committee was supported by officers of the Policy & Members' Services Unit. Technical and Professional support was provided by officers of the Directorate of Environmental Services.

3. Background

- 3.1 During the Autumn of 2000 England and Wales suffered the wettest autumn since records began, some 270 years ago. Recurrent heavy rainfall in October and November 2000 caused prolonged, extensive and in some places, repeated flooding. The flood levels in many places were the highest on record. In many locations there had been no previous record of flooding.
- 3.2 Around 10,000 properties across the country - largely in Yorkshire, the Severn valley and parts of the south east - were damaged by the floods. The cost of these floods, combined with wind damage, is estimated to have cost the insurance industry at least £700 million, according to the DTLR. In Wokingham over 600 locations were affected and 8,000 sandbags issued.
- 3.3 In some parts of the country (Worcestershire and Kent for example) the major flooding was largely due to the impact of significant tidal rivers combined with other causes. The four main causes of flooding in Wokingham District could be divided into four main categories i.e. problems with main river, highway and land drainage and public sewers.
- 3.4 In the light of the floods the Select Committee was set up with the following Terms of Reference.

4. Terms of Reference

- 4.1 To assess the impact of the recent floods on the social, economic and environmental well-being of the District, with particular reference to individuals and businesses.
- 4.2 To identify ways in which the likelihood of flooding can be minimised by the Council and others.

- 4.3 To identify priorities for action by the Council and others, (including where possible the identification of responsibility for ditches, waterways and sewers on privately owned land) to minimise the impact of any future flooding, and any relevant financial costs.
- 4.4 To consider appropriate Government guidance and policy, in particular DRAFT Planning Policy Guidance 25 (PPG25) relating to future development.
- 4.5 **NB** PPG25 was issued, in final version, by the Government, during the course of the Select Committee [July 2001].

5. Methodology

- 5.1 Members agreed a programme for the Select Committee which would include presentations on the effects of the flooding, the Town and Country Planning process and the management of water within river catchments. Professional Officers from within the Council and other agencies were invited to share their experience, knowledge and expertise. It included a two-stage consultation process. They heard witnesses in who had been affected by the flooding and those who would be involved in future planning and management of responses to any flooding or threat of flooding.
- 5.2 An initial consultation exercise elicited responses from 23 individuals and organisations. The respondents are listed at Appendix A.
- 5.3 Members of the public were given the opportunity to expand on their written submissions in the form of an open discussion with Members of the Select Committee on 13th August 2001. This was developed, on 15th August 2001, by a round table discussion of relevant professional officers from across a range of organisations who are involved in the day to day management or planning to deal with such issues.
- 5.4 Members considered the wide range of issues raised and came up with a set of recommendations. These were developed into an Action Plan which can be found in Section 10 of this report.
- 5.5 This Action Plan will need to be approved by Overview & Scrutiny Committee followed by Cabinet.
- 5.6 There are some Actions within the Action Plan which will be the responsibility of partners. Those partners have not yet been consulted on this Draft or the Action Plan. It will therefore be necessary to secure the commitment of all partners to the Action Plan.

5.7 The Select Committee wishes to recommend its method of working as a model which could successfully be adopted by future Scrutiny Panels.

6. Findings

6.1 Witnesses from a range of organisations, agencies and individuals gave oral evidence to supplement the written evidence which was also collated. Witnesses are listed at Appendix B. They were invited to take part in round-table discussions with Members of the Select Committee.

6.2 The Select Committee received a paper on Water Resource Management from The Country Land and Business Association (CLA) which set the floods in the context of development on floodplains and the concept of a grant scheme for landowners to "allow the floodplain to do its job". The Select Committee considered that this was a valuable contribution to the background to the flooding and requested that copy of the paper should be included as Appendix C to this report.

6.3 In considering the economic impact of the floods the Select Committee received evidence that insurers have a number of concerns relating to the protection of existing properties and the potential for increased exposures in future due to further development on the flood plain. The Association of British Insurers (ABI) member companies have given an undertaking to continue to provide cover to existing policyholders in high flood risk areas for domestic and small business properties until the end of 2002 except in exceptional circumstances.

6.4 The Select Committee heard that the total number of individual locations of flooding identified was 605. This included roads, such as the A329 and A327 being closed to traffic, whilst the A321 was threatened. In Swallowfield and Arborfield many other minor roads closed due to flooding. The duration was variable, although frequently for two days. Approximately half of all of the flooding was associated with main rivers (such as the Loddon and Thames, Emm Brook and Twyford Brook) over-topping their banks or failure of flood defences. Slightly less than half of reported incidents resulted from problems with highway drainage. Smaller percentages related to problems with land drainage and yet a smaller portion could be ascribed to public sewers.

<i>1 Principal cause of flooding</i>	<i>No. of locations</i>	<i>% Distribution</i>
Highway drainage	225	37
Land Drainage	67	11
Main River	292	48
Public Sewers	21	4
TOTAL	605	100

- 6.5 Prior to the formation of the Select Committee the Engineering Division had undertaken a major consultation exercise with Town and Parish Councils and commissioned a report to provide a thorough assessment of the highway and land drainage flooding which took place in the District. This contained photographs together with detailed maps and plans assessing the principal causes of flooding and apportioned responsibilities. All incidents had been plotted to determine any patterns. This significant piece of work was tabled.
- 6.6 The Select Committee heard that responsibilities for flooding and drainage are complex. The agencies involved and their principal areas of responsibility are as follows:

Wokingham District Council	Highway drainage (and elements of land drainage)
Thames Water	Public Foul and Surface Water Sewers
Environment Agency	Main Rivers (and elements of land drainage)
Landowners (Riparian Owners)	Land drainage
DEFRA (Department for Environment, Food & Rural Affairs) formerly MAFF	Flood and Coastal Defence Policy

- 6.7 The causes of flooding are manifold and complex and are influenced by wider climate change. A useful description of how flooding occurs and the impact of climate change can be found in an appendix to PPG25; a copy of which can be found at Appendix D to this report. In submissions by the Environment Agency, Thames Water and Council Officers the Select Committee heard that, nationally, there is inadequate funding for many agencies to provide necessary remedial action to reduce the likelihood of flooding happening and to reduce its impact in the event that it did occur.

The Council's Response

- 6.8 The Select Committee considered what the Council had done with respect to its own responsibilities in relation to highway and land drainage. It looked at whether the Council had done as much as it could have done to minimise the risk of flooding occurring and whether actions had been carried out at the appropriate time. It became clear that the exceptional weather conditions exposed the vulnerability to flooding of many parts of the District when subjected to sustained periods of exceptionally high rainfall. It was acknowledged that the primary source of flooding was due to main rivers which are the

responsibility of the Environment Agency.

- 6.9 The Council had reacted very positively in response to calls for assistance and distributed over 8000 sandbags free of charge to over 600 calls for help. However, because there was an absence of stockpiled sandbags, (due to there not being a dedicated Flood Plan,) it is acknowledged that there was a delay in providing sandbags. They had to be filled, (and staff resources were limited) and then transported to areas of the district where access was difficult due to flooding and associated traffic congestion.
- 6.10 It was noted that the reactive works and operational costs to the Council, for responding to and dealing with all types of immediate problems relating to flooding, was approximately £100,000. Because this figure is less than the threshold of £245,000 the Council could not claim back any of these expenses from the Government under the Bellwin Scheme. The costs therefore were funded from the revenue budget and the costs were funded by supplementary estimate.
- 6.11 It was reported to the Select Committee that the Environment Agency is currently undertaking a major publicity campaign (September 2001) which advises that it is the owners' responsibility to be prepared and to protect their own properties against flooding. It suggests that if the local authority is unable to help with providing sandbags then there are a number of commercial suppliers who sell sandbags and other flood protection products (e.g. floodboards) directly to the public.
- 6.12 However, although the Council had taken a pro-active stance in providing sandbags during the 2000 floods and at other times in the past, whether for residential or commercial premises, there is a lack of clarity over how the Council intends to act in future instances or risks of flooding. In particular there is no formal policy for the timing and distribution, or any eligibility criteria, for the receipt of sandbags. Furthermore there is no clear policy as to whether these should be distributed at no charge to businesses and/or residents. This had highlighted the need to draft and agree a policy and develop a Flood Plan as part of the Council's overall Emergency Plan. This will complement the existing Highways Winter Maintenance Plan and be communicated into future information and advice, as highlighted in paragraph 6.29 and following.
- 6.13 The Members of the Select Committee on Flooding considered that the Council had a moral responsibility for supplying sandbags free of charge to all requests and recommends that it should maintain an adequate stockpile of sandbags for this purpose. A minimum of 5,000 is proposed.

Records

- 6.14 Members noted that the drainage records held by the Council were insufficient for a number of reasons. Historically no single agency had responsibility to hold information, maps etc on all the water-related infrastructure within the District. This is split between organisations such as Water Companies (formerly Water Authorities), Environment Agency (formerly National Rivers Authority), Wokingham District Council (and formerly Berkshire County Council) and HM Land Registry (with respect to private land ownership).
- 6.15 The Engineering Division does not currently have records of the highway drainage system. Records were not available from the County Council and although isolated areas of pipework have been mapped there is no composite record. There are, however, records of all gully locations which are used to direct the gully emptying operation. It is recognised that there is a need to commit significant resource to recording the location of all highway drains, but this resource is not currently available. The District Council could establish a Highway Drainage Survey Team to establish the precise location of all highway drains or alternatively employ a consultant to carry out the work. The revenue implication of this would be approximately £40,000 per annum for an expected period of four years.
- 6.16 The Land Drainage responsibilities generally rest with the riparian owner and the District Council does not maintain records of the land drainage infrastructure.

One-off Remedial Works and Ongoing Maintenance

- 6.17 Officers of the Council reported on remedial works to the highway drainage system that were being undertaken to mitigate the risk of further flooding. This has highlighted a number of defects in the system which are being addressed, as far as possible, as part of the ongoing maintenance works funded from the existing revenue budget. Three hundred and ninety four sites were identified as requiring remedial action; 45 have been completed and a further 32 programmed. Whilst some works have been funded from the existing Highways Maintenance budget it is probable that additional funds may be required in the event of similar bad weather leading to a recurrence of the flooding and winter emergencies. It should be noted that solutions to some of the problems will require major works and these will be subject to detailed investigations. The funding implications will need to be addressed as part of any future capital programme.
- 6.18 In respect of improving the highway and land drainage systems for which the District Council is responsible it was suggested, to the

Environmental Services Committee on 2 July 2001, that the following amendments are introduced:

- Cleaning highway gullies on at least a six monthly cycle (currently up to 15 months)
- Cleanse all catchpits, soakaways and carrier drains on a yearly cycle
- Work in partnership with the riparian owners regarding ditches and culverts to ensure they understand and undertake their responsibilities
- Implement a kerb correction programme to provide adequate kerb and channels
- A yearly cycle of grip* cutting, carrier drain cleansing and general maintenance. [NB: A grip is a channel in a verge to allow water to flow from the highway into a roadside ditch.]
- Monitor and vary cleaning frequencies where appropriate.

Additionally there is still a need to undertake physical works to resolve some flood locations.

- 6.19 To achieve the above a growth item of £100,000 per annum would be required in order to minimise the risk of further flooding.
- 6.20 The Select Committee also heard that flooding incidents had been responded to according to the severity of the impact on people's lives. The order of priority had been:
- 1 - House
 - 2 - Garage
 - 3 - Gardens
 - 4 - Driveway
 - 5 - Road outside house
 - 6 - Other.

Members agreed that prioritisation was necessary in such events and considered the above to be appropriate.

Rôle of the Environment Agency

- 6.21 The Environment Agency, which is the principal flood defence authority in England and Wales, has a lead rôle in Flood Warning. Floodline is the Agency's national flood warning and advice service providing a single national telephone line for the public to ring on any matter associated with flooding. This service includes Quick Dial Numbers for information about local areas e.g. the River Loddon Catchment. The Agency will also mail householders at risk from flooding and provides an internet site. The Agency aims to help residents understand about flooding and what they can do to prepare before, during and after a flood. When flooding occurs the Floodline service can be extraordinarily busy and there is scope for the Council to provide a

more interactive/dedicated local service.

- 6.22 Select Committee Witnesses complained that the Floodline system did not operate adequately to provide optimum assistance for residents. In particular there was a lack of local knowledge and generic advice offered was inappropriate or irrelevant. Frequently a long wait on the phone would only result in being redirected elsewhere.
- 6.23 Officers of the District Council reported that they are arranging meetings with the Environment Agency to explore the possibility of enhancing and complementing the Floodline Service. The main objective would be to provide residents with a more informed, accurate, speedy answer to enquiries during office hours. The optimum this would include the provision of direct advice to callers through improved liaison with the other Agencies, thus providing better, more accurate and more specific local (rather than national) information. The outcome of these discussions will form part of the Flood Plan, described in paragraph 6.12. However, it should be noted that in order to enhance the service significantly, additional trained telephone operators would be required. Outside office hours Forestcare will continue to provide call handling and messaging service unless the Council determined that some form of 24 hour emergency operation should be mounted from Shute End.

Rôle of Town & Parish Councils

- 6.24 Town & Parish Councils reported that there had been delays in putting out road closure signs and then removing them once roads had been re-opened. A number of Town & Parish Councils had offered assistance with the storage of sandbags and road signs and had offered to place these out. This would then free up the District Council's resources and ensure a more rapid response in other locations. The District Council recognises that it had a statutory Health & Safety responsibility for Highways and could not delegate responsibility to other agencies for the erection of traffic signs and road closures. Storing sandbags at local distribution centres, managed and supervised by the Town & Parish Councils is feasible. These arrangements will be incorporated into the Flood Plan.
- 6.25 It was acknowledged that there are difficulties associated with the sparsity of information and accurate records on Riparian Owners who have responsibilities to maintain the bank and bed of their section of watercourse, in order to avoid any obstruction of flow in the watercourse. Whilst the Council has permissive powers under statute to serve notice on riparian owners it prefers to work in partnership to ensure the effectiveness of the whole land drainage system.

- 6.26 The Select Committee heard that Parish Councils would be keen to assist the District Council by informally "chasing up" riparian owners. It will be necessary to ensure that any legal and statutory requirements are met.
- 6.27 Some Town & Parish Councils had also offered to provide informal, local "Flood Wardens" who would feed into and feed off the wider information network which would include the Environment Agency and District Council. They could monitor local situations, act as conduits for information as well as providing a local resource and their rôle would need to be publicised.

Communications

- 6.28 The Town & Parish Councils frequently have a wealth of local knowledge about locations and histories of flooding, and considered that they had a rôle to play in ensuring that this was fed in, as appropriate, to decision makers. Thames Water proposed that joint workshops /liaison meetings could be held with the Town & Parish Councils, Environment Agency, Thames Water and Wokingham District Council to engage local communities in discussions about problems at specific locations.

Information and Advice

- 6.29 Following the floods of 2000 the Council's Public Protection Division had distributed an information leaflet to those affected by Flooding. This was in line with an Institute of Environmental Health Officers' standard document and included advice on dealing with cleaning up, health and hygiene issues.
- 6.30 The Select Committee noted that, as part of the development of a Flood Plan, guidance notes based on the Environment Agency's recommendations on preventative action would be issued (see Appendix E). Members expressed the desire that these be distributed to residents and businesses whose properties were at risk from flooding, to Town & Parish Councils, District Councillors and for them to be distributed through doctors' surgeries and libraries.
- 6.31 The Select Committee considered that all of the information on flooding should be included in a centre spread in an issue of Wokingham News. This should include information on what actions the Council had taken to minimise the risk of flooding, details of rôles and responsibilities, advice for residents on what they might do in advance of flooding and advice on actions which might be taken in the event of flooding. The Select Committee also felt that, as a complex issue, there was scope for further awareness raising among other Members of the Council.

- 6.32 The Engineering Division is preparing a set of Fact Sheets, which will include one on Flooding and is developing information for the Council's Intranet (private) and Internet (public) websites.

6.33 **Town & Country Planning**

6.34 The Town & Country Planning process was examined to determine how consultation with relevant parties currently takes place and discussion focussed on the way this could be improved to minimise the occurrence of flooding and to prevent further instances. Concern was expressed by the Select Committee that, with respect to future Planning Applications, development on the flood plain should be resisted.

6.35 During the period of the Select Committee new national planning guidance on Development and Flood Risk (PPG25) was issued by the DTLR. This includes:

- A clear statement that the Environment Agency has the lead rôle in providing advice on flood issues both at a strategic level and in relation to Planning Applications.
- A clear statement that building in the functional flood plains used to hold excess water in times of flood should be wholly exceptional - and limited to essential infrastructure.
- A risk based approach that directs authorities and developers to give priority to sites at lower risk.
- A requirement that where alternative low risk sites are not available adequate flood protection or other mitigation measures must be made.
- A requirement that builders must fund the provision and future maintenance of flood defence works, and sustainable drainage measures necessary as a result of their development to avoid adding to flood risk elsewhere.
- Firm advice that local authorities should keep their development plans under review in the light of the latest available information on flood risk from the Environment Agency.

6.36 Members felt that PPG25 (and in particular the third and fourth bullet points above) did not provide sufficient protection against development having a detrimental effect on the ability of the local environment to withstand the effect of flooding. They considered that the use of low risk land first followed by higher risk land later simply delayed the detrimental impact of development; and that low risk sites should only be developed after all other available sites have been developed. They considered that flood protection or other mitigation measures should be funded by the Developer. Members therefore wished to use the findings of the Select Committee to challenge the number of houses allocated to the region. When the new Structure Plan for Berkshire

(2001-2016) is produced the Wokingham District allocation should be critically examined to this end.

- 6.37 The Select Committee received evidence of some of the engineering solutions which can be incorporated into development to reduce the likelihood of flooding happening and to minimise its effects when it does. These included the use of balancing ponds, Sustainable Urban Drainage Systems (SUDs), flood alleviation schemes. A Glossary of these terms can be found at Appendix H.
- 6.38 The Local Plan (which is being used for Development Control purposes and on which the report of the Inspector into the Public Inquiry is awaited) contains policies which address:
- surface and groundwater protection (WIC15);
 - development in flood plains (WIC16);
 - surface water run-off (WIC17);
 - works affecting water courses (WIC18); and
 - foul water drainage (WIC19). (See Appendix D.)
- 6.39 Members considered that these Policies ought to be expanded to require developers to provide for appropriate balancing ponds, Sustainable Urban Drainage Systems (SUDS) and other relevant anti-flooding measures. This ought to include the requirement for ongoing maintenance of such measures. The Select Committee considered that no planning consent should be given unless these requirements be met.
- 6.40 There will be an opportunity to reconsider these policies in light of the Inspector's Report on the Deposit Draft Local Plan and government guidance including PPG25 and when Officers have had the opportunity to investigate with the Environment Agency and other relevant agencies.

Lobbying Other Agencies

- 6.41 The Select Committee considered that a great deal had been done to attempt to reduce the risk of flooding and that actions were in train to help deal with instances when they do occur. However, they also felt that the Council had a wider rôle in community governance and that this could be supported by lobbying other bodies to play their parts in assisting the residents and businesses of Wokingham.
- 6.42 It was felt that development in the flood plain should be avoided in totality and not simply deferred until some time in the future when low-risk sites had been depleted. To deliver this the Select Committee wishes for the Council to challenge the Government (DTLR) and lobby local MPs on the requirement for future development within

Wokingham.

- 6.43 Thames Water could be enabled to direct additional resources into the alleviation of flooding in the District (e.g. by improving/protecting foul and surface water sewers from surcharging). It is understood that this issue would need to be considered by OFWAT.
- 6.44 Members also considered that additional funding should be made available to the Environment Agency in order to implement flood alleviation measures in Wokingham and that this could be requested of the Government.
- 6.45 Members also wished to urge the Environment Agency to listen to local knowledge when it comes to the history of flooding on land. It was felt that the Select Committee had already enabled this to happen, however, it was keen for this to be continued after the Select Committee's work had finished.

7 Recommendations

- 7.1 There are twenty main recommendations under five main themes which have emerged from this Select Committee. Its recommendations to the Overview & Scrutiny Committee are as follows:
 - a) Introduce enhanced maintenance regime as set out in paragraph 6.18. In order to do this it will be necessary to seek an increase in the Council's highways revenue budget of £100,000 per annum. (See 10.1)
 - b) To agree the priority system for dealing with flooding incidents that require minor work and to complete those minor works that have been identified and scheduled (which are within the Council's area of responsibility). To enable this an appropriate revenue budget will need to be allocated to allow these issues to be dealt with as physical resource allows. (See 10.2)
 - c) Develop a list of possible major flood alleviation schemes and subsequently determine which schemes should be taken forward to feasibility assessment. Investigate possible external funding opportunities. (See 10.3)
 - d) Ensure that the Council has due regard to PPG25 and Local Plan Policies with respect to decisions about Development on Flood Plains. (See 10.4)
 - e) Draft Policy to set out Council's responses to instances of flooding and in particular over the distribution and timing of the issue of sandbags etc. Develop a Flood Plan. (See 10.5)
 - f) Enhance cross-departmental working within the Council. (See 10.6)

- g) Require Developers to provide and fund adequate Flood Alleviation schemes in any relevant proposals. (See 10.7)
- h) To investigate the introduction of local improvements in WDC's services which link to and assist the Environment Agency's Floodline system. (See 10.8)
- i) Ensure that an adequate stockpile of sandbags is built up. The budget required to establish and maintain a stockpile of 5,000 sandbags would be £10,000. (See 10.9)
- j) Increase/improve contingency planning in the event of flooding by the creation of a Flood Plan. (See 10.10)
- k) The District Council should establish a Highway Drainage Survey Team or employ a consultant to establish the precise location of all highway drains. The revenue implication of this would be approximately £40,000 per annum for an expected period of four years. (See 10.11)
- l) Work with Parish/Town Councils, where they are willing/able to do so to provide practical local assistance. (See 10.12)
- m) The District Council to contribute to twice-yearly workshops/liason meetings with relevant agencies and hosted by Thames Water. (See 10.13)
- n) Engage Town/Parish Councils (where willing and able) to assist in 'chasing up' notices served on private landowners to clear ditches and waterways and with regard to legal constraints. (See 10.14)
- o) Engage with Environment Agency to ensure that the flood warning status and all relevant information is provided direct to the Council (See 10.15)
- p) Raise awareness of flooding issues, produce a glossary of terms and develop Council website to assist with understanding of the terminology. (See 10.16)
- q) Produce leaflets/ literature to raise awareness of practical issues around flooding. (See 10.17)
- r) Provide double page spread in appropriate WDC News. (See 10.18)
- s) Write to Central Government, urging increased funding to be made available for the Environment Agency. (See 10.19)
- t) Urge Thames Water/OFWAT to direct additional resources to the prevention of flooding. (See 10.19)
- u) Challenge Government to reduce the number of houses allocated to the District of Wokingham through the Structure Plan. (See 10.20)

7.2 The recommendations are elaborated in the Action Plan which was drawn up in the light of the findings of the Select Committee and can be found at Section 10 at the end of this report.

7.3 The Action Plan is SMART – Specific, Measurable, Attainable, Relevant & Time-based. It is also outcome-focused – i.e. it sets out what rele-

vance the Action has with respect to the "customer".

- 7.4 The Action Plan ranks the importance of each improvement action as High, Medium or Low, particularly in terms of the impact on service users. Although it is important to ensure the target date is realistic and achievable, a high priority action must be addressed as expeditiously as possible. It is envisaged that Overview & Scrutiny will monitor the implementation of the Action Plan. It is, therefore, essential that the target date for completion is clearly expressed.
- 7.5 Ideally, an individual ought to be named to ensure responsibility and accountability is clear. For some actions it may be more appropriate to allocate the task to a group, body or organisation. In both cases it is essential that the person(s) identified is in a position of authority appropriate to achieve the task and that they are signed up to it.
- 7.6 In order to get all parties signed up it is proposed that the Select Committee reconvenes a meeting involving the other agencies and partners and secures their commitment to it.

8 Financial Implications

- 8.1 When the issue of flooding was considered by the Environmental Services Committee on 2 July 2001 it was resolved that the proposed changes to the drainage maintenance regime be submitted to this Select Committee on Flooding. A supplementary estimate of £20,000 was approved by the Policy and Strategy Committee to fund additional investigations. However, it was noted that a further sum of £100,000 is required to support the enhanced maintenance regime to minimise the risk to residential properties and that this will need to be sustained in future years.
- 8.2 There are additional financial implications which are listed in detail in the Action Plan and summarised in the table below. If the Action Plan is implemented in full the total financial implication cannot yet be identified with the current information that is available.
- 8.3 The implementation of the recommendations of this Select Committee will have resource and financial implications which are included in the figures in the table below except for working with Town & Parish Councils and developing information systems which will have a resource implication which is believed to be 0.5 FTE.
- 8.4 The funding implications of any major drainage infrastructure improvements will need to be addressed as part of any future capital programme.

Summary of Financial Implications		
Para	Improvement Action	Sum
10.1	Enhanced Maintenance of Highway drainage	£100,000 p.a.
10.2	Completion of minor works	To be established ⁽¹⁾
10.3	Major Flood Alleviation Schemes / feasibility	To be established ⁽²⁾
10.8	Enhancement of telephone response	To be established ⁽³⁾
10.9	Sandbag stockpile	£10,000
10.11	Highway Drainage Survey Team or Consultant	£40,000 x 4 years
10.10	Improve contingency planning }	£12,500 p.a. ⁽⁴⁾
10.12	Work with Town and Parish Councils in providing sandbags etc }	
10.13	Engage in workshops/liason meetings }	
10.14	Work with Town and Parish Councils over riparian owners }	
10.15	Work with Environment Agency }	
10.16	Raise public awareness }	
10.17	Produce information and literature }	
10.18	Produce centre spread in WDC news }	
Notes		
⁽¹⁾ Dependent on individual detailed survey results		
⁽²⁾ Will be subject of Cabinet/Portfolio Report		
⁽³⁾ Dependent on method of delivery and extent of changes		
⁽⁴⁾ Equates to 0.5 FTE employee at Assistant Engineer level		

9 Environmental Implications

- 9.1 A reduction in the likelihood of flooding will improve the quality of life for the residents.
- 9.2 It is also important to recognise that any improvements to the land drainage system may impact upon local ecology and consent will be required from the Environment Agency.

10. Action Plan

	Priority	Improvement Action	Impact	Source	End Date	Action by
	▶	Enhance Preventative Protection:				
10.1	H	Introduce enhanced maintenance regime. In order to do this it will be necessary to seek an increase in the Council's highways revenue budget of £100,000 per annum. See para 6.18	Improved preventative action to reduce the likelihood of flooding occurring. Resource Issue: £100,000 growth p.a.	Witness session 13/8/01; Minute of the Environmental Services Committee, 2/7/01	April 2002	Select Committee on Flooding
10.2	H	To agree the priority system and Complete any minor works (which are within the Council's area of responsibility) up to £20,000 per location to reduce the risk to properties. See paras 6.17 and 6.20	Prioritise responses with aim of reducing risk to properties Resource Issue: Budget required to resolve list of flooding events, list will be addressed as budget allows	Select Committee Meeting - 13/9/01	Ongoing	Head of Engineering Services
10.3	L	Develop a list of possible major Flood Alleviation Schemes and subsequently determine which schemes should be taken forward to feasibility assessment. Investigate possible external funding opportunities. See para 6.17	Reduced risk to properties Resource Issue: Budget required to fund feasibility studies for each scheme and then capital budget will be required for scheme	Select Committee	Dec 2001 (list only) Implementation depending on budget allocation	Head of Engineering Services Select Committee on Flooding
10.4	M	Ensure that the Council has due regard to PPG25 and Local Plan Policies with respect to decisions about Development on Flood Plains. See para 6.33 and 6.35	Reduced likelihood of development in vulnerable areas without appropriate preventative action being undertaken	Select Committee	Ongoing	Head of Planning & Transportation

	Priority	Improvement Action	Impact	Source	End Date	Action by
10.5	H	Draft Policy to set out Council's responses to instances of flooding and in particular over the distribution and timing of the issue of sandbags etc. Develop a Flood Plan. See Para 6.12	Increased clarity over the Council's responsibilities and others	Witness session 13/8/01 and 15/8/01	Nov 2001	Head of Engineering Services
10.6	M	Enhance cross-departmental working within the Council. See paras 6.23 and 6.28	Streamline Council's response to flooding.	Select Committee	Ongoing	All Agencies and all Officers
10.7	M	Require Developers to provide adequate Flood Alleviation schemes in any relevant proposals. These can include the use of Sustainable Urban Drainage Systems (SUDS) (Balancing lagoons, swales, permeable pavements, reed beds etc) where appropriate . See para 6.38	Provide improved means by which water can be managed thus mitigating impact of changing weather patterns.	Select Committee; Witness sessions 15/8/01	Ongoing	Head of Planning & Transportation Services/ Environment Agency
	▶	Enhance Contingency Plans				
10.8	H	Begin discussions with Environment Agency to introduce local improvements in WDC's services which link to and supplement the Floodline system i.e. the central contact point for residents/public. See para 6.23	Enable more direct, and appropriate contact with relevant bodies for public. Resource Issue: Enhancements may demand additional telephone operators with associated revenue implications especially if out of hours service is considered	Witness sessions 13/8/01 & 15/8/01	Oct 2001 (Discussions)	Head of Engineering Services
					Implementation dependent on budget allocation	Select Committee on Flooding

	Priority	Improvement Action	Impact	Source	End Date	Action by
10.9	H	Ensure that an adequate stockpile of sandbags is built up. These should be distributed to Town and Parish Councils (where feasible) and issued in accordance with the agreed Policy. See para 6.13	Ensure a more rapid response can be made to requests for sandbags Resource Issue: Revenue budget implication of £10,000.	Select Committee 2/10/01	Oct 2001 Depending on budget allocation	Head of Engineering Services
10.10	H	Increase/improve contingency planning in the event of flooding. See para 6.29 Develop Flood Plan. See Para 6.12	Improve ability to respond in the event of flooding occurring	All Meetings; Witness sessions 13/8/01 & 15/8/01; Written consultation	Oct/Nov 2001	Emergency Planning Officer
10.11		Identify by survey the location of all highway drains in the District See Para 6.15	Improve effectiveness and efficiency, especially the Council (and others) ability to respond to problems as they arise through the identification of highway drains. Resource Issue: Creation of Highway drainage survey team or employment of consultant to carry out the survey est £40,000 p.a. for 4 years	Select Committee	Four Years from identification of budget	Head of Engineering Services

	Priority	Improvement Action	Impact	Source	End Date	Action by
	▶	Undertake Joint Actions:				
10.12	M	Work with Parish/Town Councils, where they are willing/able to do so, to maintain possession of sandbags at pre-acknowledged hotspots; contribute to a Flooding Emergency Plan; enhance information network Provide feedback to residents and Town and Parish Councils representatives on findings, etc of the review through Parish Liaison Meetings. See para 6.24 and following.	Enhanced infrastructure in preparation for flooding incidents Maximise available resources Improved awareness of the Council's responsibilities Improved awareness of the responsibilities of others	Witness session 13/8/01& 15/8/01; Written consultation	Ongoing	Emergency Planning Officer/ Town & Parish Councils/ Select Committee on Flooding
10.13	L	Wokingham to contribute to twice-yearly Thames Water workshops /liaison meetings between relevant agencies. See para 6.28	To learn from 'cross-agency' working and local knowledge To improve communication between Town & Parish Councils, Thames Water, Environment Agency and Wokingham District Council	Witness session 15/8/01	Spring 2001	Thames Water/ Head of Engineering Services/ Head of Planning & Transportation/ Environment Agency Town & Parish Councils
10.14	L	Engage Town/Parish Councils (where willing and able) to assist in 'chasing up' notices served on private landowners to clear ditches and waterways with due regard to legal constraints. See para 6.26	Improve Council's ability to take action which is otherwise difficult due to lack of resources. Prevent the Council from having to discharge the responsibilities of riparian owners.	Witness session - 13/8/01	As and when necessary	Head of Engineering Services / Town & Parish Councils

	Priority	Improvement Action	Impact	Source	End Date	Action by
10.15	H	Engage with Environment Agency to ensure that the flood warning status and all relevant information is provided direct to the Council. See para 6.23	Provides ability to respond at a local level and direct resources efficiently and effectively	Witness session 15/8/01	Oct 2001	Head of Engineering Services/ Environment Agency
	▶	Raise Awareness				
10.16	M	Enhance education for Members, and the public, raise profile of terminology, e.g. Flood Alleviation Schemes, Flood Compensation Scheme using internet, leaflets etc. Produce webpages on WDC's internet/intranet Produce Fact Sheet on Flooding See para 6.32	Better understanding of issues	All Meetings; Witness sessions 13/8/01 & 15/8/01; Written consultation	Ongoing March 2002 Dec 2002	Head of Engineering Services/ Head of Planning & Transportation
10.17	H	Produce leaflets/ literature to raise profile regarding relevant contact points in times of flooding, which organisation is including a glossary to help explain the 'terminology' associated with flooding. See para 6.31 Include raising awareness of the role of town/parish councils, e.g. in event of them holding of road signs/sandbags. See paras 6.26 an 6.27 10.17 CONTINUES BELOW	Improve awareness of the apportionment of responsibilities. This would include the Council's and the responsibilities of others, including riparian owners, Thames Water, the Environment Agency, landowners and householders	All Meetings; Witness sessions 13/8/01 & 15/8/01	Ongoing	Head of Engineering Services/ Emergency Planning Officer

	Priority	Improvement Action	Impact	Source	End Date	Action by
		CONTINUED FROM 10.17 ABOVE Raise profile/education of importance of holding water, where this is more beneficial than letting water flow to main river etc. See para 6.29 Distribute leaflet to properties potentially affected by flooding and distribute via doctors surgeries and libraries. See para 6.30	See above	See above	See above	See above
10.18	L	Provide double page spread in appropriate WDC News both on what action the Council has taken. See para 6.31	Raise awareness before the possible season of flooding and thereby enable better public preparedness	Meeting 2/10/01	Autumn 2002	Head of Engineering Services/ Public Relations Manager
		▶ Undertake Lobbying:				
10.19	M	Write to Central Government, urging increased funding to be made available for the Environment Agency to enhance protection in Wokingham. See para 6.41 Urge Thames Water / OFWAT to direct additional resources to the prevention of flooding in Wokingham. See para 6.40	Enhanced preventative action to reduce the likelihood of flooding occurring	Witness session 15/8/01; Select Committee	Dec 2001	Select Committee on Flooding

Priority	Improvement Action	Impact	Source	End Date	Action by
10.20	M Challenge Government on the number of houses being allocated under RPG9. Critically examine Wokingham aspects of the Berkshire Structure Plan. See para 6.35	Reduced impact of development on existing infrastructure	Select Committee	In line with Structure Plan timetable	Director of Planning & Transportation Services/ Relevant Portfolio Holder(s)

Appendix A

Responses received to written consultation

A Resident	Arborfield
A Resident	Shinfield
A Resident	Swallowfield
Chairman	Wargrave Parish Council
Clerk to the Council	Barkham Parish Council
Clerk to the Council	Earley Town Council
Clerk to the Council	St Nicholas Hurst Parish Council
Clerk to the Council	Shinfield Parish Council
Clerk to the Council	Sonning Parish Council
Clerk to the Council	Swallowfield Parish Council
Clerk to the Council	Twyford Parish Council
Clerk to the Council	Winnersh Parish Council
Commercial Manager	Goldline Buses
Councillor	Wokingham Without PC
Divisional Officer	Royal Berkshire Fire & Rescue Service
Manager, Household & Property	Association of British Insurers
Operations Manager	First Beeline Buses Ltd
Regional Director	Country Landowners Association
Regional Planner	National Housebuilders' Association

Appendix B

Witnesses giving evidence to the Select Committee on Flooding

A Resident	Arborfield
A.N Other	Earley Parish Council
A Resident	Swallowfield
A Resident	Swallowfield
A.N Other	Swallowfield Parish Council
A.N Other	St Nicholas Hurst Parish Council
A.N Other	St Nicholas Hurst Parish Council
Clerk to the Council	Shinfield Parish Council
Clerk to the Council	Swallowfield Parish Council
A.N Other	Winnersh Parish Council
A.N Other	Winnersh Parish Council
A.N Other	Wokingham Without Parish Council
Consultancy Contract Manager	Wokingham District Council
Emergency Planning Officer	Wokingham District Council
Flooding Strategy Manager	Thames Water
Head of Planning & Transportation Services	Wokingham District Council
Head of Engineering Services	Wokingham District Council
Principal Development Control Officer	Wokingham District Council
Operations Team Leader, West, South East Area	Environment Agency
Regional Sewerage Manager	Thames Water
Vice Chairman	Wokingham District Association of Local Councils

Appendix G

Background Papers/ Supporting Evidence:

The following Background Papers and Supporting Evidence were tabled:

Appeal Decision relating to a Planning Application in Charvil

Area of responsibility for flood alleviation and maintenance

Draft PPG25, Council's response to Draft PPG25 and Final version summary

Environmental Services Committee Report 2 July 2001 - report entitled Wokingham District Flooding Investigation

Extract from Wokingham District Local Plan Deposit Draft as amended February 2000

Flood plain map

Internal Memorandum on new procedures in light of PPG25 on development and flood risk

Notes of Meetings held on 14 June, 5 July, 25 July, 13 September & 2 October

Protocol between Local Government Association and the Environment Agency - Working Better Together in Town & Country Planning

Records of Witness meetings on 13 August and 15 August 2001.

Responses to written consultation

Susceptibility to flooding map

Wokingham District Council 2000-2001 Flooding Apportioned Responsibilities

Wokingham District Council's Standard Operating Procedures in Relation to Severe Weather & Flooding

Wokingham Flooding Assessment - Highways & Land Drainage

Held by: Ian Hunt{ }

Division: Policy & Members' Services{ }

Dept: Chief Executive's{ }

Contact No: 0118 974 6052{ }

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