

# Winter Floods & Storms 2013/2014

DRAFT Debrief Report

**Note:**

This report is currently in **DRAFT** status due to the ongoing analysis of several surveys.

As a result the Executive Summary, Conclusions and Recommendations are not completed and should be considered as interim results. These may be adjusted when all the survey results have been analysed, audited and consultation completed.

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West Berkshire  
C O U N C I L

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DRAFT PENDING CONSULTATION

# Executive Overview & Summary

The adverse weather over the winter of 2013/14 tested the Council, other responders and the community not only because the effect and impact of the storms and flooding but the longevity of the event over almost 5 months.

The impact was extensive not only in time but in relation to the geographic area of West Berkshire affected; the resources required by a significant number of agencies; the national media coverage that was surrounding the issues not only in this area but in the whole country including significantly the Somerset levels, the East Coast 'tidal' event etc which had the knock on effect of the Government being involved.

After any such event the communities affected often ask why? How did it happen? What could have been done to prevent it? and What is going to be done to prevent it happening in the future?

In order to answer some of these questions a debrief is carried following any major incident, emergency or near miss.

This report therefore provides details about the event, how it built up, the impact and management and provides recommendations in relation to what can be done by way of prevention, reducing the risk for the future and suggested improvements for the management and coordination for the future. These improvements and actions are not only referring to recommendations that West Berkshire Council should consider implementing but also other responding agencies, the Government and the residents and communities themselves.

A further report is being prepared by Highways and Transport Service as required under the Section 19 of the Flood & Water Management Act 2010. These are being prepared alongside this report to provide more details with respect to what caused specific properties and areas to flood.

After any major event it is important to look at what went well and what could be improved. Throughout the report there are details of good practice and positive actions which should not be overlooked.

# Section 1 - Overview of Debrief Process

This section provides an overview into the debrief aims, objectives and process.

## Debrief Background

- 1.1 Following any major incident debriefing should be carried out in order to identify lessons learned. These debriefs can be undertaken at local Council level, Thames Valley or even at a National level depending on the severity and impact of the incident.
- 1.2 For the flooding in 2013/14 there have been a number of debriefs taking place as follows:
  - (i) Thames Valley Local Resilience Forum (TV LRF).
  - (ii) Paul Netherton (ACC Devon and Cornwall) coordinated feedback from Local Resilience Fora, (LRF) Strategic Coordinating Centre Chairs to consider the National perspective of those affected.
  - (iii) A Ministerial Recovery Group (led by Brandon Lewis from Dept of Communities and Local Government (DCLG)) focused on the immediate issues surrounding recovery from recent events.
  - (iv) There is also a special cabinet committee on recovery looking at the longer term issues for flood prevention and response.
  - (v) Somerset Levels and Moors & Lincolnshire LRF Tidal Surge reports.

There is not expected to be a 'Pitt<sup>1</sup>' style investigation but this cannot be ruled out.
- 1.3 West Berkshire Council has undertaken a debriefing process which has been split into 2 parts. The first focused on the response and recovery processes including the coordination of both from the start of the flooding through to the end of recovery. The second part focused on the technical reasons why properties flooded or nearly flooded – this is also a requirement under the Flood and Water Management Act 2010<sup>2</sup> and has been led by the Highways & Transport Service.
- 1.4 The aim and objectives of the debrief process is to find out:

AIM:

What could be done differently if a major incident happened again (not just flooding).

OBJECTIVES:

  - (a) Confirm what happened and why.
  - (b) Establish what went well and what could have been done better
  - (c) Develop an action plan of improvements

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<sup>1</sup> [The Pitt Review](#)

<sup>2</sup> [Flood and Water Management Act 2010](#)

## Debrief Process

- 1.5 In order to achieve a thorough review a number of review/debrief methods were used in an attempt to capture as much information as possible which are set out below:
- (a) Five Online Surveys (using the Website on-line Survey Monkey) to be completed by:
    - (i) Residents – Website on-line surveys and hard copies sent to properties believed to be flooded.
    - (ii) Businesses – Website on-line and hard copies sent to properties believed to be flooded.
    - (iii) Professional Partners – direct email to agencies involved in the response and recovery stages.
    - (iv) Flood wardens, Town & Parish Councils and Ward Members – direct email.
    - (v) West Berkshire Council staff – direct email to all staff.
  - (b) Consultation with Local Flood Forums (Lambourn Valley, Pang Valley and Streatley).
  - (c) West Berkshire Council Service area debriefs – internal to each service.
  - (d) West Berkshire Council Emergency Planning Liaison Officer debrief session – providing details of Service debriefs.
  - (e) Review of other agency's and flooded area debrief reports where provided.
  - (f) Feedback from the Overview and Scrutiny Management Commission.
- 1.6 In developing the different reviews, consultations and debriefs a number of themes were initially identified as areas to explore as set out below:
- (a) To understand the risks in West Berkshire to flooding.
  - (b) To review if lessons had been learnt from previous events.
  - (b) To understand the background and therefore cause of the significant flooding in West Berkshire.
  - (c) To clarify the involvement of West Berkshire Council and the impact on services.
  - (d) To establish a greater understanding of the awareness of the residents and businesses in West Berkshire to flooding and potentially other emergencies which may affect them.
  - (e) To understand the resilience of residents, businesses and communities in West Berkshire.
  - (f) To identify whether residents and businesses would like to get more involved in mitigating the impact of flooding and other events in the future.
  - (g) To consider the effectiveness of response and recovery plans.
  - (h) To consider the effectiveness of Command and Control processes – for West Berkshire and for multi-agency environments.

- (i) To consider the joint working of the professional partners involved in the response.
  - (j) To review the effectiveness of communications – internally and externally to the communities and professional partners.
  - (k) To consider the resources used and any weaknesses.
  - (l) To review the process of information sharing by way of specific data (including vulnerable people), information management systems.
- 1.7 This report is set out in the following sections which provide the information to qualify the evidence required to meet the aims and objectives:
- Section 2 Background to flooding in West Berkshire and the learning from previous events.
  - Section 3 Winter 13/14 Adverse Weather Event – the cause & impact.
  - Section 4 Adverse Weather Event Management.
  - Section 5 Consultations, Debriefs and Reviews Analysis.
  - Section 6 Conclusions and Recommendations.
- 1.8 In sections 2, 3 and 4 there are 'Key Points' highlighted which are the authors views both positive and concerns of the event.
- 1.9 It should be noted that whilst this debrief process has been taking place a number of actions have already been initiated.

## Section 2 - Background to Adverse Weather esp Flooding in West Berkshire

This section provides details in relation to flooding historically in West Berkshire, flood legislation and learning the lessons from previous events. Information was sourced from the Council's Local Flood Risk Management Strategy and information provided by officers.

### 1. Flooding in West Berkshire

#### 1.1 Overview

1.1.1 Like many other areas across the United Kingdom, West Berkshire has experienced serious flooding in recent years. These events have provided first-hand experience of the consequences of flooding and the impact it has on the communities affected which can be far reaching from short duration nuisance flooding of highways, open space and river corridors to flooding of people's homes and businesses leading to property damage, loss of personal possessions, temporary relocation during home repair works and environmental impacts from pollution. The effects of flooding can also lead to both physical and emotional health issues and ongoing anxiety amongst people in flood risk areas.

#### 1.2 Flooding Events in West Berkshire

1.2.1 The table below sets out some of the significant flooding events to affect some or all of West Berkshire over the last 100 years.

Year	Event	No of Properties Flooded
1915	River Thames flooding of Purley on Thames	
1947	River Thames flooding of Purley on Thames	
1974	River Thames flooding of Purley on Thames	
1990	River Thames flooding of Purley on Thames	
1992	Flooding across district including – Newbury, Thatcham, Aldermaston, Sulhampstead & Pangbourne	
1993	River Pang flooding of Standford Dingley and Pangbourne and localised flooding along River Enbourne	
1999	River Kennet Flooding of Burghfield and River Pang flooding of Tidmarsh and Pangbourne.	
2003	River Thames flooding of Purley on Thames 40 homes flooding in (worst event since 1947)	40
2007	Widespread flooding across district with river and surface water flooding (July 2007)	2500+
2008	River Thames flooding of Purley on Thames, Flash flooding in Thatcham – Bowling Green Way, Woolhampton- The Mill Stream overflow	0
2009	The Mill Stream overflow – Woolhampton	

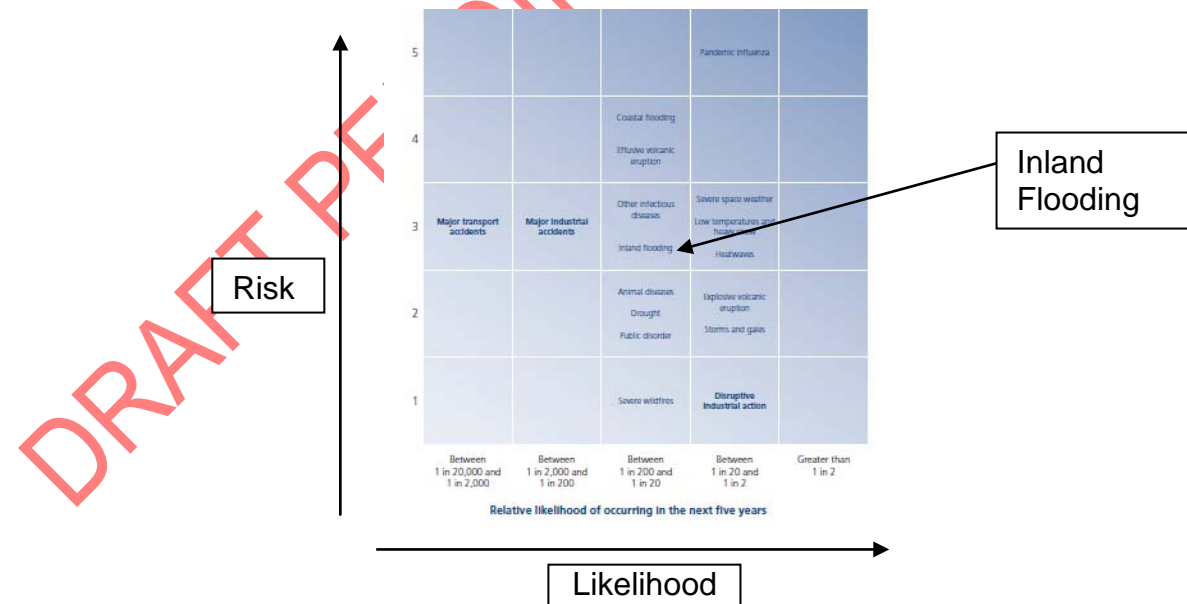
Year	Event	No of Properties Flooded
2010	River Lambourn – Head Waters overflow- Upper Lambourn	
2012	River Thames flooding of Purley on Thames	
2012/13	River Kennet flooding of Pingewood, Denford Mill (Hungerford), Marsh Benham and Ufton Lane (Ufton Nervet). River Lambourn and River Pang – via groundwater	~10 homes
2013/14	River Thames – Purely on Thames, Streatley, Pangbourne; River Kennet- Denford, Hampstead Marshall, Newbury, Woolhampton, Theale, Holybrook, Pingewood; River Lambourn – all communities, River Pang – all communities. Mix of fluvial and groundwater flooding for over 4.5 months.	~ 271homes & 35 businesses.

### 1.3 Adverse Weather

1.3.1 In recent years there have been a number of extreme weather events including 2 major surface water flood events in the last 10 years. The most significant was in July 2007 and 2008; two extreme cold and snow winters in 2009/10 and 2011/12; planning for a drought in spring of 2012; followed by two extremely wet years in 2012/13 and 2013/14.

1.3.2 These facts along with the details of the Thames Valley LRF Risk Register<sup>3</sup> confirm that Adverse Weather is a Very High risk to the communities of West Berkshire.

1.3.3 Whilst the above points relate to West Berkshire area, nationally it has been noted that extreme weather situations are becoming more frequent across the country with flooding being high on the National Risk Register<sup>4</sup> developed by the Cabinet Office.



<sup>3</sup> <http://www.thamesvalleylrf.org.uk/useful-links/publications/risk-register.ashx>

<sup>4</sup> <https://www.gov.uk/government/publications/national-risk-register-for-civil-emergencies-2013-edition>



1.3.4 Whilst there is ongoing debate about the causes and impacts of global warming, it is becoming more apparent that our climate is changing in line with scientific prediction on the consequences of a rise in global temperatures. The effects of climate change are a likely increase in extreme weather and flooding.

**Key Point 1:**

- Many of the communities in West Berkshire are aware of the risks of adverse weather, particularly flooding, in part due to the frequency of these natural events.
- Many communities have also put in place their own protection measures or process to mitigate the impact of these events.

## **1.4 Learning the lessons from previous events**

- 1.4.1 Following any major incident, emergencies and some near miss events a debriefing exercise is undertaken in order to identify areas of good practice but also where the response could have been better. These debriefing exercises can be managed by the Council or other agencies. The purpose of these debriefs is not to assign blame but to learn and improve the plans and therefore the response in the future.
- 1.4.2 In recent years reports have been written for a number of events including fires involving gas cylinders; a gas leak which resulted in evacuations; water supply disruption events etc. Whilst these debriefs may be in relation to a specific incident the learning can often be transferred to any incident.
- 1.4.3 It should be noted that these debriefs also include exercises which again can inform improvements.
- 1.4.4 Specifically in relation to flooding there was a major report written in 2007. This review included a national flooding review and a local review undertaken by the Council. The Council's review focused on its own effectiveness with 45 recommendations subsequently being issued. These are set out in Appendix A to this section.
- 1.4.5 The Appendix shows that 35 of the actions have been completed and 10 are detailed as 'ongoing'. These ongoing actions mainly reflect the work with communities which could be declared as closed but in effect they are being subsumed into business as usual and ongoing projects.
- 1.4.6 Some specific actions which have resulted from debriefs of flooding and adverse weather include:
- (a) Development of an Adverse Weather Plan
  - (b) Development of Flood Forums – including Lambourn Valley, Pang Valley, Newbury and Thatcham.
  - (c) Development of community emergency plans
  - (d) Training and Exercising of staff in the plans.

## Key Point 2:

- Action Plans have been developed and implemented arising from previous flooding and other emergencies.

- 1.4.7 Nationally a major change which came out of the National Pitt review was the development and enactment of the Flood And Water Management Act 2010 (FWMA)<sup>5</sup>
- 1.4.8 This FMWA places duties on the Local Authorities as Lead Local Flood Authorities (West Berkshire Council) to develop a Local Flood Risk Management Strategy. This was developed by the Council in 2013 and was approved by [Executive on 8 May 2014](#). This provides a lot more detail as to the types of flooding, roles and responsibilities in relation to flooding. It also includes an action plan for the Council, professional partners and communities to progress.

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<sup>5</sup> <http://www.legislation.gov.uk/ukpga/2010/29/contents>

## Appendix A - OSMC 2007 Flood Report Recommendations – Update

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
1	Work should be undertaken to reduce the risk of flooding to Aldermaston school and to mitigate the effect that any flooding may have.	Aldermaston School, Environment Agency, West Berkshire Council (Education)	This has not been the first time that the School has, or has nearly flooded. As a result in order to mitigate future problems and potential disruption to learning then an assessment of why it flooded, how it flooded, how it can be prevented or at least reduce the risk of it being flooded again should be undertaken. Thereafter the options available assessed, costs established and a way forward agreed. Some interim measures may be necessary in the required to reduce the risk until a more permanent system is in place.	The assessment of why the school flooded, how it flooded, how it can be prevented or at least reduce the risk was undertaken. A permanent solution to provide building flood resistance was installed over Easter 2014. <b>CLOSED</b>
2	All schools at risk from flooding should subscribe to the Environment Agency's 'Floodline' alert service.	Local Education Authority (West Berkshire Council), all West Berkshire Schools (Education)	This would be a positive step in the preparation and prevention process. At least 2 phones should subscribe. Guidance and systems will be necessary in order that Schools know what to do should a warning be received.	Education worked with schools after the 2007 flooding, provided them with information and encouraged them to register. However, to put this into some context, there are very few schools at risk from river flooding. There are two schools within the Environment Agency's flood zones. The school flooding in 2007 was predominantly due to pluvial and poor on-site surface water drainage. In a severe weather event Education Service monitor the environment agency and met office sites and receive information from Civil Contingencies. The Service increases the level of communication with schools, including passing this information on, supporting schools with measures to protect and dealing with incidents. <b>CLOSED</b>
3	An investigation should be undertaken to find out how the flooding in Pangbourne happened, and work be planned to ensure all water courses are properly maintained and any possible flood alleviation measures are put in place.	Environment Agency (Highways)	This is supported.	A significant number of improvements have been undertaken by the EA and WBC on the Sulham Brook to reduce risk of flooding at Briars Close and Bourne Road. WBC has also constructed a flood defence wall along the western perimeter of the School and Briars Close. Taking account of near floods that have occurred since 2007, WBC is liaising with the EA on further potential measures at Sulham Brook and the River Pang. <b>CLOSED</b>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
4	Any Category 1 responder taking steps to prepare its incident/control room for an anticipated emergency should inform partner organisations of its intention.	all Category 1 responders Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	In 2008 this was reflected in the Council's Major Incident Plan. (Activation and EOC Sections) It has is also in the Thames Valley Local Resilience Forum (TV LRF) MAP. An email group for activation has been put in place. <b>CLOSED</b>
5	The Environment Agency should work to provide more localised warnings of flooding, including to responding agencies.	Environment Agency Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	The flood alert areas have been changed since 2007 including Purley on Thames which has its own alert area. Locations for monitors are reviewed at least annually by the EA. <b>CLOSED</b>
6	A national framework should be developed for the forecast and warning of flash and groundwater flooding.	Environment Agency Civil Contingencies	This is supported. The Met Office is also likely to be involved in this process. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>New flood alert system in place</li> <li>New Flood Forecasting in place providing a daily likelihood of flooding including type.</li> </ul> <b>CLOSED</b>
7	Information and communication technology options should be examined to assist in the management of large numbers of incident related calls.	non-blue light Category 1 responders Civil Contingencies	WBC has subscribed to such a system in the past. The company has now closed and as a result a new system is being investigated for across Berkshire. There is likely to be a capital and revenue cost for this project for which there are no funds at the moment	<p>West Berkshire Council's contact centre and the Civil Contingencies Team have progressed information sharing through the ELM System in order to ensure emerging issues are identified early.</p> <p>In addition there are now projectors available in the Contact Centre in order that the staff can quickly review the situation as it takes place in order that more accurate information can be shared.</p> <p>On the TV LRF website – Members area there is a new Daily reporting system in place.</p> <p>The new National Resilience Extranet is due to be available from Jan 10, but is being trialled in Nov 09. There is an information management system available on this secure IT system costs etc being determined</p> <b>CLOSED</b>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
8	The use and deployment of 'Airwave' radios and other appropriate systems by non-blue light Category 1 responders should be examined to allow better communication between organisations at incident sites.	all Category 1 responders Civil Contingencies	This is supported however as with 7 above there will be a cost implication for this project. It should be noted that the Police, RBFRS and SCAS are all on or about to migrate onto the Airwave system.	4 x Airwave sets were purchased by WBC in 2012 – allowing for long distance communications with WBC and other agencies if needed in a secure environment. 8 x local area radios have been purchased to support local area requirements of officers when operating in the same area. <b>CLOSED</b>
9	Public engagement should be actively sought to ensure that their expectations of responding agencies in the event of a future incident are realistic. Informing householders of what they can do for themselves along with encouragement to register for flood warnings should feature strongly. Consideration should also be given to the creation of local flood forums.	Environment Agency, West Berkshire Council Civil Contingencies	This is supported. Work is currently ongoing with Template Parish Plans for emergencies in order that they can be engaged and support the overall response. Part of these plans should be the inclusion of a flood plan.	<ul style="list-style-type: none"> <li>• Leaflets and info available on the Councils website.</li> <li>• Some difficulties with this action due to lack of support from communities.</li> <li>• Flood Forums initiated (some post 2007 some more recently in 2012 due to lack of interest for some communities.</li> <li>• Other flood forums commencing.</li> </ul> <b>ONGOING</b>
10	The locations of vulnerable people, along with their particular needs, held by the Emergency Operations Centre should be matched with areas known to be at risk from flooding.	West Berkshire Council Civil Contingencies	This is a difficult area in that who is known to the Council as being Vulnerable will not be the only vulnerable people in a flood. Indeed more people become vulnerable in flooding. In addition we only hold details on our systems of people we are responsible for. Therefore instead of a list of vulnerable people in flood risk areas being maintained it is suggested that the following action may support the needs of the vulnerable in an emergency:	<ul style="list-style-type: none"> <li>• Vulnerable people plan in place</li> <li>• Sharing of data still an area of concern esp with utilities.</li> <li>• WBC has a good system of reviewing own clients and engaging with others to ensure our vulnerable clients are looked after.</li> <li>• Engagement with Care Homes and Providers has taken place with more planning and exercising to take place annually.</li> </ul>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
			The in-house lists of all known vulnerable people to the Council will be maintained and used on a parish/street or other combination basis during an emergency. In additions a system of contacting all other service providers, RSLs and Parish Councils will be investigated in order to ensure that as far as possible all vulnerable people can be identified as quickly as possible during an emergency.	<ul style="list-style-type: none"> <li>Local communities more engaged into the process via flood wardens and parishes.</li> <li>RSLs more engaged in process.</li> </ul> <b>ONGOING</b>
11	A designated Chief Officer should always be available for decision making in the early stages of an emerging incident.	West Berkshire Council <b>Civil Contingencies</b>	This is supported. This may involve a rota of trained and nominated Directors and Heads of Service to be available by telephone as a minimum.	<ul style="list-style-type: none"> <li>Now in place with notification as to when the CEO is not available.</li> <li>Reflected MIP</li> </ul> <b>CLOSED</b>
12	Police and other category 1 responders should ensure that their emergency plans contain systems and processes for the proactive review of resource allocation during sustained and widespread incidents.	all Category 1 responders <b>Civil Contingencies</b>	This is supported. With respect to progressing this action within WBC a process should be developed in order to support the actions.	<ul style="list-style-type: none"> <li>This is reflected in the Council's Major Incident Plan (EOC Section)</li> <li>There is a Berkshire &amp; Thames Valley LA Mutual Aid Agreement</li> <li>A list of assets held by LA's across TV is available on LRF website</li> </ul> <b>CLOSED</b>
13	Updates of information subject to frequent change, for example contact information, should be scheduled at least annually. Procedures to record changes as they occur should also be established.	all Category 1 responders <b>Civil Contingencies</b>	This is supported but should be undertaken at least 4 monthly with respect to key telephone numbers.	System in place and reviewed quarterly. <b>CLOSED</b>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
14	District and Parish Councillors should be utilised to provide local knowledge and appropriate assistance in their local areas, acting as EOC 'eyes and ears' on the ground, in the event of localised incidents.	West Berkshire Council Civil Contingencies	This is supported. In order to achieve this and support the actions then action cards, training and reflective jackets will be provided to District Councillors. Suggested action cards and training support will be provided to Parish and Town Councillors.	<ul style="list-style-type: none"> <li>Action card in Members Handbook</li> <li>Annual Training available</li> <li>Reflective Jackets issued.</li> </ul> <b>CLOSED</b>
15	All staff and District and Town/Parish Councillors, should be clearly identifiable at incident scenes and rest centres.	West Berkshire Council, Parish and Town Councils Civil Contingencies	This is supported. WBC Councillors will be provided with WBC labelled vests. Further investigation as to Town and Parish identification will be necessary due to funding.	<ul style="list-style-type: none"> <li>Reflective Jackets issued to ward members but not Town &amp; parish Councils.</li> <li>Advisory info give to Town &amp; Parish Councils</li> </ul> <b>CLOSED</b>
16	All Parish and Town Councils should develop their own emergency plans.	West Berkshire Council, Parish and Town Councils Civil Contingencies	This is supported. Templates are being drafted for consultation and training dates are planned.	<ul style="list-style-type: none"> <li>Templates created</li> <li>Training Provided</li> <li>Individual meetings attended</li> <li>Can only advice and support but not force communities to have plans.</li> <li>Recent increase in requests for support.</li> </ul> <b>ONGOING</b>
17	All Parish and Town Councils should identify specific measures to mitigate the effect of future flood events. These should include, but not be limited to, subscription to the Environment Agency's flood warning service and the identification of flood wardens.	Parish and Town Councils Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>Several communities along flood risk areas have flood wardens</li> <li>As part of flood forums check undertaken re sign up to loodline service.</li> </ul> <b>ONGOING</b>



No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
18	More West Berkshire Council staff should receive Emergency Operation Centre, response and rest centre training.	West Berkshire Council Civil Contingencies	This is supported. It should be considered that this is part of induction training. All staff trained should be identified should also give there permission that they are happy to be called in times of emergencies. It may be that this should be considered as part of there standard employment conditions.	<ul style="list-style-type: none"> <li>Ongoing project</li> <li>2 x training sessions per year on into to EP including EOC</li> <li>Ongoing training programme set out annually</li> </ul> <b>ONGOING</b>
19	Business continuity plans should be amended to reflect the reality that in prolonged incidents staff diverted to deal them will not be available to carry out their normal duties.	West Berkshire Council (Internal Business Continuity)	This is supported	<ul style="list-style-type: none"> <li>Corporate and BC plans in place.</li> </ul> <b>ONGOING</b>
20	Responsibility for evacuation from property should be clarified at a local level. This should be recorded in the Emergency Plan and communicated to all Category 1 responders and the public.	West Berkshire Council Civil Contingencies	There is no clear evacuation contact system or responsible agency. There is a need for liaison across the Cat 1 responders, a need for Government input with respect to legal requirements and duties. There then needs to be a communication strategy as to how any agreed way forward for the public. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>NO one can be forced to leave their property except in terrorism incidents. Advice can be provided but no one can be forced</li> <li>TV LRF evacuation plan in place</li> </ul> <b>CLOSED</b>
21	The policy to cover the use, storage locations and deployment of sandbags should be objectively reviewed in light of the events of July. The arrangements should be reflected in the Major Incident Plan and communicated to the public and other stakeholders.	West Berkshire Council Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>There is no statutory duty to provide sandbags by the Council. Instead owners of properties should take their own precautions in order to flood protect their property.</li> <li>A sandbag Policy was approved by Individual Decision</li> </ul> <b>CLOSED</b>



No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
22	All Category 1 responders should ensure that they have appropriate plans, equipment and facilities in place to be able to communicate with isolated residents who may not have access to the usual communications channels.	All Category 1 responders Civil Contingencies	This is supported. A full review of communications assets in WBC should be undertaken, gaps identified and thereafter a plan established in order to fill the gaps. This will be a multi-agency requirement.	<ul style="list-style-type: none"> <li>This is an ongoing project due to changes in communication means.</li> <li>A TV LRF Warning &amp; Informing Plan is in place.</li> <li>Via Flood wardens and Parish/Ward Members a means of communication has been employed.</li> <li>Difficult to communicate with everyone</li> </ul> <p>ONGOING</p>
23	Emergency plans should be reviewed to ensure that the media is informed effectively.	all Category 1 responders Civil Contingencies	This is supported. WBC will review its action plans for the media and the public information routes in order to support the PR team and ensure information to the widest audience.	<ul style="list-style-type: none"> <li>Thames Valley Media Plan</li> <li>Reflected in the Council's Major Incident Plan (Media Section).</li> <li>Key staff have attended media training in Jan 08.</li> </ul> <p>CLOSED</p>
24	Consideration should be given to establishing measures that would allow Parish and Town Councils to make temporary and local road closures.	Department for Transport, Thames Valley Police, West Berkshire Council (Highways)	There are concerns with respect to this proposal with respect to the responsible closure of roads. Clear guidance would need to be given in order to protect the road network, protect Councils involved and to protect road users to ensure they are not being put more in harm's way as a result of the diversions. There would also be cost implications with respect to signage etc.	<ul style="list-style-type: none"> <li>Current legislation only permits closures of roads by Highways Authority Officers or the Police Officers.</li> </ul> <p>CLOSED</p>
25	Procedures should be established to ensure that actions taken by local incident commanders do not have unforeseen consequences elsewhere.	all Category 1 responders Civil Contingencies	This is supported. Key is communication. Liaison and progress will be monitored by Civil Contingencies Team.	<p>Clarified in the Major Incident Plan for the EOC Controller to be aware.</p> <p>Arrangements are in place for teleconferencing and video links with Thames Valley Police and other agencies in order that cross border issues are less likely.</p> <p>This will be further addressed through EOC training.</p> <p>CLOSED</p>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
26	All emergency school closure decisions should be taken in consultation with the Local Education Authority.	West Berkshire Council, all West Berkshire schools (Education)	This is supported.	There is an established process for communication and support when a school is faced with a potential closure situation. During a severe weather event the service increases monitoring and communication with schools. This further supports decisions to be made in a consultative way. However, the final decision lies with the Headteacher. There is a 'school closure' e-mail address for schools to use to notify Education Service of closure or risk of closure. Officers have also attended Headteachers meetings to discuss and promote the process. <b>CLOSED</b>
27	All schools should review their emergency plans to ensure that lessons learnt during the flooding are reflected, particularly those around media management.	all West Berkshire schools (Education)	This is supported	All schools are actively encouraged to review plans following incidents with support from the Education Service Since 2007 this has been supported by action cards and amendments to emergency plan templates provided by the Education Service. Media course were run in Jan 08 with a full day session being dedicated to teachers. <b>CLOSED</b>
28	The role of the Recovery Working Group should be explained to all community stakeholders to ensure that normality is restored as quickly as possible	West Berkshire Council Civil Contingencies	This is supported. A new plan is being developed and will be consulted on in the next few months.	<ul style="list-style-type: none"> <li>• Dec 2008 a Thames Valley LRF Recovery Protocol was adopted.</li> <li>• Staff training undertaken</li> <li>• Exercised in 2012 and 2014</li> </ul> <b>CLOSED</b>
29	GOSE should continue to be involved in the formulation of emergency response and recovery plans.	GOSE Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	GOSE (now DCLG RED) are fully integrated into the planning, responding and recovery aspect of Emergency Planning. They are also a regular attendee at multi-agency planning meetings. <b>CLOSED</b>
30	Council Tax relief should be considered for those who do not have full use of their homes	West Berkshire Council Council Tax	This is supported. However legislation may not allow.	A policy is in place with a review process available should there be a need to extend void properties after an emergency. <b>CLOSED</b>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
31	The recommendations from lessons learnt exercises should be critically examined and resources made available for their implementation and action where appropriate.	all Category 1 responders  Civil Contingencies	This is supported. Consideration may be required as to how to support the CC team with short or medium term specialists being involved.	<p>This is standard practice as was shown after Purley floods 2003, Ufton Nervet Train Crash 2004, flooding in 2007, Gas Leak 2008, snow events 2009/10 etc.</p> <p>Due to scale this can vary from a hot debrief session to a more formalised process.</p> <p>This is reflected in Major Incident Plan the outcomes and lessons identified are build into practice and proceedings and updates placed in the Major Incident Plan.</p> <p><b>CLOSED</b></p>
32	District and Parish Councillors should have sight of and contribute to any proposed actions having effect on their areas of responsibility.	all Category 1 responders  Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>• Roles and responsibilities have been clarified through the Major Incident Plan action cards for Councillors, (consultation is on-going on the action cards as part of the MIP review) the EOC Controller and the Crisis Management Team.</li> <li>• The process would normally be for communications to be via the Crisis Management Team (CMT) where the leader and relevant ward Councillors would be present.</li> <li>• In an incident with a wide geographic then the Group Executives would have a key role in ensuring Councillors were informed.</li> <li>• It should be noted however that at the start of a major incident things can move very fast with decisions having to be made quickly in order to save life, property etc. To this end it may not always be possible to engage before an action is taken with the Councillors affected. This would also be the case if the decisions were being made at the Strategic Coordinating Group, Gold.</li> </ul> <p><b>CLOSED</b></p>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
33	The actions identified in the West Berkshire Council Highways and Transport Service report, once costed and prioritised for implementation, should be subject to consultation with Parish and Town Councils and to public review by the Council's Overview and Scrutiny Commission.	West Berkshire Council (Highways + others to be determined on conclusion of the report)	This is supported	<ul style="list-style-type: none"> <li>The reports were completed and actions progressed.</li> <li>All Councils were consulted during the report writing phase.</li> <li>The programme was being progressed as quickly as possible subject to the funding available each year.</li> </ul> <p>CLOSED</p>
34	The Strategic Flood Risk Assessment should be amended to incorporate risk from flash and groundwater flooding, as well as flooding from rivers.	West Berkshire Council (Planning)	This is supported	<ul style="list-style-type: none"> <li>The SFRA project was reviewed prior to completion to take account of information from the July 07 flooding and has been amended accordingly.</li> <li>The SFRA was approved by Members at the LDF Working Group in September 08.</li> <li>It will be amended should there be further significant flooding events.</li> <li>It will be amended should there be further significant flooding events</li> </ul> <p>CLOSED</p>
35	A Land Drainage Policy should be developed to cover all aspects of the management of drainage (main rivers, surface water and foul sewers, highway drainage, watercourses).	West Berkshire Council (Highways)	This is supported. This should however be in conjunction with the EA.	<p>A new Land Drainage policy covering non-main river watercourses and roadside ditches was adopted by the Council 2009.</p> <p>CLOSED</p>
36	A recognised central authority should be established to determine the location, ownership and responsibility for all aspects of drainage.	Government Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>Reflected in the Flood &amp; Water Management Act 2010</li> <li>Info in website &amp; leaflet</li> </ul> <p>CLOSED</p>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
37	Statutory authorities should work with riparian owners to ensure that they are aware of their responsibilities and the impact that they can have to mitigate the effects of flooding.	Environment Agency, West Berkshire Council, Town and Parish Councils (Highways)	This is supported.	<ul style="list-style-type: none"> <li>This is being carried out in a number of ways including through the Land Drainage Policy, on-going work with the Town and Parish Councils, leaflets, updated websites and work with specific landowners.</li> <li>It is worth stating however that identifying all riparian owners is a mammoth task especially when large stretches are involved and potential legal action.</li> <li>A leaflet has been produced to provide advice to Riparian Owners.</li> </ul> <p><b>ONGOING</b></p>
38	Guidance should be issued to Parish and Town Councils or communities wishing to undertake maintenance on waterways, especially in sites of special scientific interest, on what is environmentally acceptable and what is not.	Environment Agency Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	<ul style="list-style-type: none"> <li>Information issued to communities</li> <li>Demonstrations undertaken</li> </ul> <p><b>ONGOING</b></p>
39	Enforcement action should be taken against riparian owners in the event of non-compliance with their maintenance responsibilities.	Environment Agency, West Berkshire Council (Highways)	This is supported.	<p>A Land Drainage Policy is has been established allowing the Council to enforce riparian landowner responsibilities with respect to the maintenance of roadside ditches and other ordinary watercourses</p> <p><b>CLOSED</b></p>
40	Maintenance and cleaning schedules should be published to demonstrate active management of resources and to inform public debate on the costs when weighed against the benefits.	Environment Agency, Thames Water, West Berkshire Council (Highways)	This is supported.	<ul style="list-style-type: none"> <li>There is schedule which has been agreed with the contractor in order to resource the programme.</li> <li>The schedule in a user friendly format on the website</li> </ul> <p><b>CLOSED</b></p>

No.	Recommendation	Owned By	Response / Action at time of OSMC	Status Prior to Floods 13/14
41	Agencies should develop and undertake regular inspection regimes for drainage systems.	Thames Water, West Berkshire Council (Highways/ Projects Teams)	This is supported.	The surface water sewers in Thatcham (owned by Thames Water) have been recorded on the Council's register of flood defence assets as required under the FWMA. The Council undertakes cyclic cleansing of gullies and reactive maintenance on highway drainage systems.
42	Although local practice already includes them, water companies should be statutory consultees on all planning developments where the impact on the existing drainage infrastructure is likely to be considerable.	Government Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	The Government is reluctant to increase the number of statutory consultees with regards to planning applications. Representations will continue to be made <b>ONGOING</b>
43	If required, within the planning development process developer contributions, (S106) money should be sought to increase drainage capacity.	West Berkshire Council (Planning)	This is supported	It is not legally possible to request S106 contribution for this purpose. Drainage issues on site or that will arise as a result of the proposed development is a material consideration in determining the proposal and should be mitigated against on site and not through a financial contribution. <b>CLOSED</b>
44	The Council should support the general recommendations made in the reports of Sir Michael Pitt, the Local Government Association, Gloucestershire County Council and Hull City Council on climate change and flooding.	West Berkshire Council Civil Contingencies	This is supported.	These are being reviewed by the WBC Flood Action Group, the Thames Valley Group and the Regional Flood Group. If there are any lessons identified to be of additional value to WBC then this will be highlighted. <b>CLOSED</b>
45	Advice should be given to farmers on actions they can take to mitigate the effects of flooding.	Department for Environment, Food and Rural Affairs (DEFRA) Civil Contingencies	This is supported. Liaison and progress will be monitored by Civil Contingencies Team.	Management of land is a DEFRA and EA responsibility. However there is a link with OSC 42 above as a result via Town and Parish Councils and other work with NFU etc all working to improve land drainage and flooding matters. <b>ONGOING</b>

## Section 3 - Winter 13/14 Adverse Weather Event & Impact

### 1. Overview

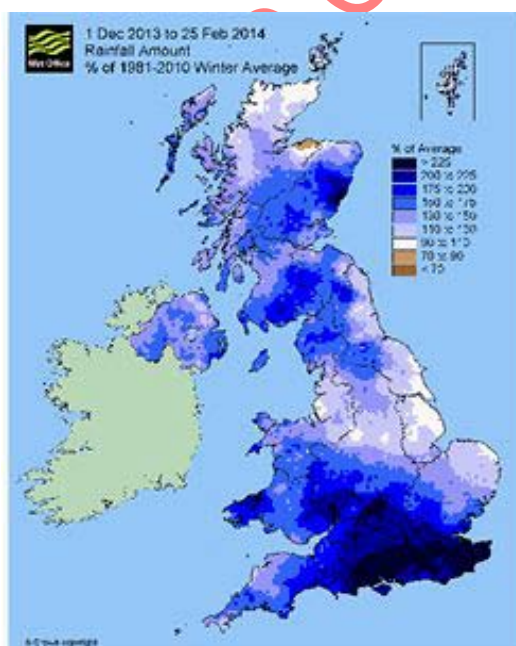
- 1.1 This section provides the details of the events building up to the Major Incident and the impact on the area of West Berkshire. The information was sourced from the log which was recorded throughout the event, a number of professional partners directly, debrief reports and Council Services following their internal debriefs.

### 2. Background to Adverse Winter Weather Event (13/14)

- 2.1 In order to understand this winters adverse weather event it is helpful to understand the background as to how the situation arose in the first instance. This starts with information on the weather conditions.

### 3. Historical Weather

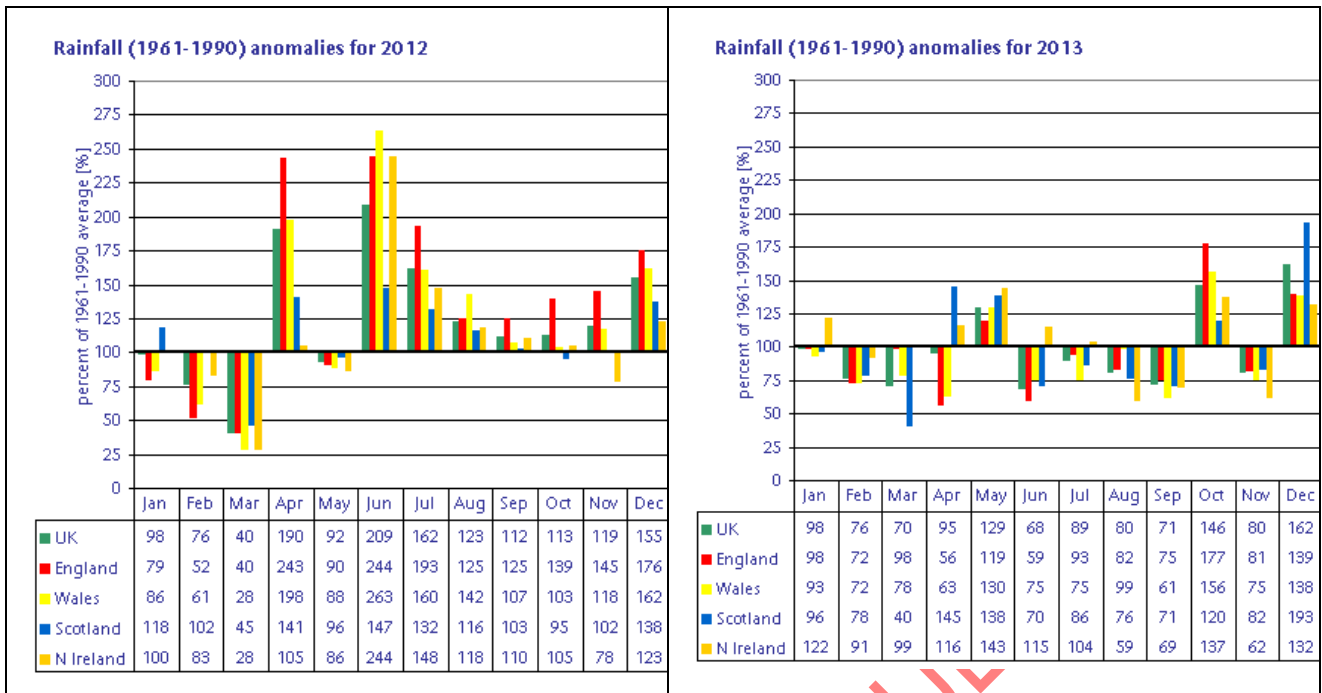
- 3.1 The Met Office reported at the end of February 2014 that the winter of 2014 in England & Wales was the wettest in 248 years. In addition it was the longest running wet period since 1766 with 435 mm of rain being recorded up to 24th February. This beat the previous record of 423 mm set in 1915. It was also on average 1.5C warmer than average winters.
- 3.2 The map below shows that in the Berkshire area, like many areas in the South East, we had in excess of 200% to 225% of the average rainfall over the December 2013 to February 2014 period.



Source Met Office

- 3.3 The Met Office have prepared a report providing details as to the facts, figures and implications of the weather events over the 3 months [A global perspective on the recent storms and floods in the UK](#).
- 3.4 The effect of this heavy rainfall was exacerbated due to previous months and years rainfalls as shown in the graphs below.



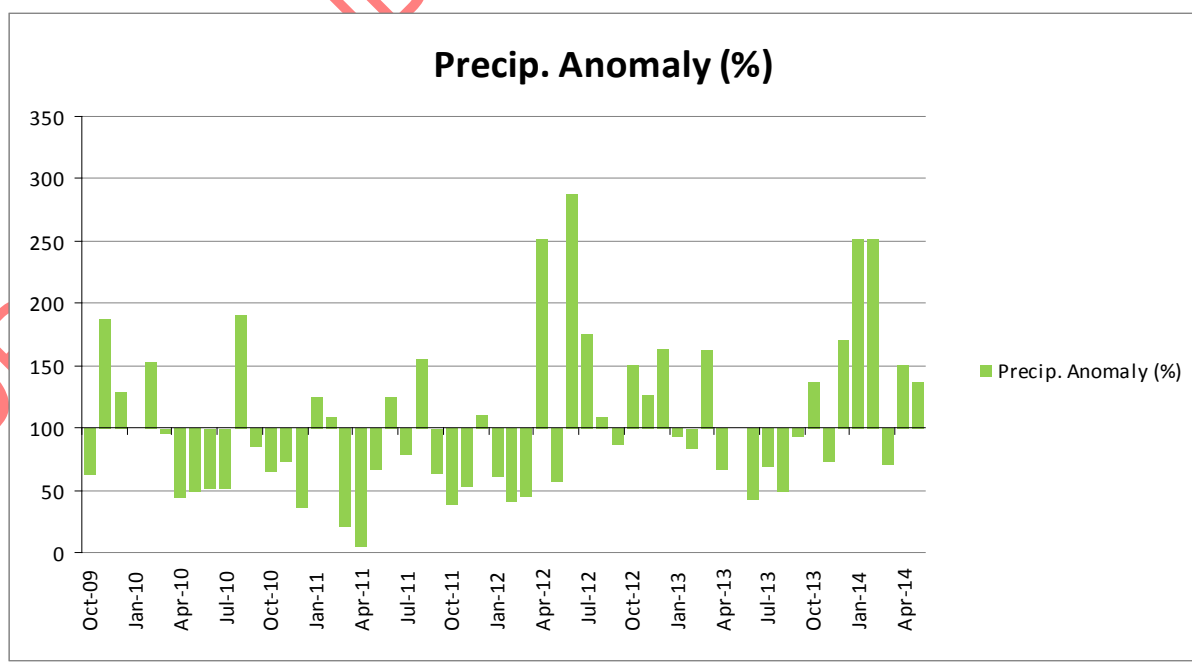


Source Met Office

The graph for 2012 shows (in red) that England, whilst having a drier than average winter, had a wetter than average spring, summer and winter.

The graph for 13/14 shows a drier than average spring with the exception of May, and an average rainfall in the summer but in October and December 2013 there was higher than average rainfall.

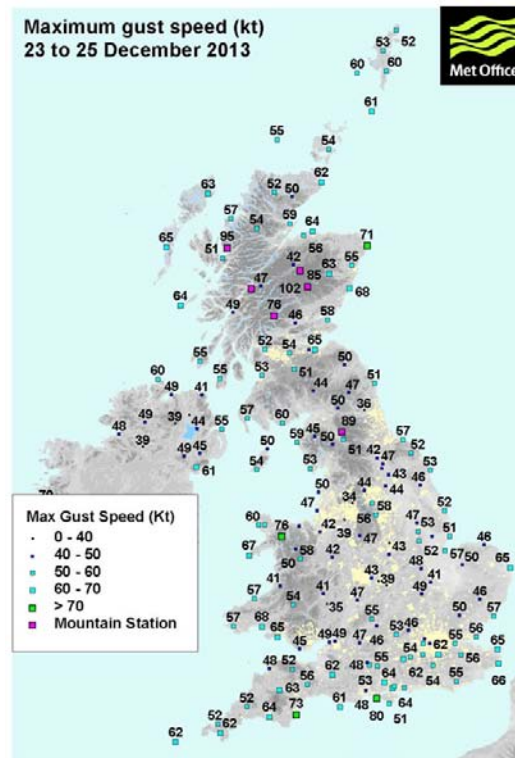
3.5 The table below shows the rainfall anomalies for Berkshire over the last 4.5 years. This shows the below average rainfall experienced in 2010 and 2011 and the significantly above average rainfall levels for 2 years from April 2013 to April 2014.



Source: Met Office



- 3.6 In addition to the high rainfall levels the winter of 13/14 also proved to be one of the stormiest winters on record. It began on 28 October 2013 when a fast-moving depression lead to winds of up to 80 mph across SE England. Across the UK from mid December to the end of February 2014 there were 12 major storms.



Source: Met Office.

### Key Point 3:

- Groundwater flooding and river flooding had occurred in the winter of 2012/13.
- The groundwater was significantly higher than normal and did not reduce to a 'normal' starting point for the winter.
- The excessive rainfall in January - February 2014, exacerbated the groundwater levels and along with river levels increasing too resulted in significant flooding across West Berkshire.
- The effect of flooding and storms added to the impact on communities and complicates the response.

## 4. Consequences of Winter Adverse Weather 13/14

4.1 The consequences of the adverse weather across the UK, including West Berkshire were significant and fell into 3 main areas:

- (1) **River Flooding**
- (2) **Groundwater Flooding.**
- (3) **Storm Damage**

## 4.2 River Flooding

4.2.1 River flooding caused much of the flood damage over the winter regardless of the source of the water into the rivers. The Environment Agency had recognised that in the early autumn due to the dry soils there was a minimal rise in river levels in response to rainfall. However by the end of the autumn the soils were approaching saturation. This however is normal for the time of year and initially gave the Environment Agency little cause for concern. However, as the rainfall continued in December 2013 and January 2014, the situation and concern changed<sup>6</sup>.

4.2.2 **River Flood Alerts & Warnings.** Between 23 Dec 2013 and 11 June 2014 the Environment Agency issued several Flood Alerts and Flood Warnings<sup>7</sup> for the West Berkshire area. When the risk of flooding to properties reduced the alerts and warnings were removed, this had the impact of some the alerts and warnings being issued on several occasions for the same stretches of river.

Information relating to these alerts and warnings are set out below:

Fluvial Flood Alerts	12
Fluvial Flood Warnings	17
Fluvial Severe Flood Warnings	0
Longest Period of a Fluvial Flood Alert	156 Days – River Lambourn
Longest Periods for Flood Warnings	30 Days - Lower Kennet, Theale/Holybrook 27 Days- Pang @ Bucklebury 21 Days – Thames @ Purley on Thames
Most Flood Warnings & Alerts in place at one time	The most intense period was from <b>14 Feb - 17 Feb</b> when: - 3 Flood Fluvial Warning - 7 Flood Fluvial Alerts & - 2 Groundwater Alerts in place ALL Rivers and all sections of the rivers were affected with the risk of flooding to properties.
River Pang	2 Flood Warnings over same period for different sections
River Lambourn	3 Flood Warnings over same period for different sections
River Kennet	3 Flood Warnings, 1 was issued three times for Lower Kennet for different dates. (Dec, Feb and March)
River Thames	7 Flood Warnings Purley Village had Flood Warnings on the area 3 times (Dec, Jan and Feb) Pangbourne & Streatley stretches having Flood

<sup>6</sup> Flood Event Report Winter Floods 2013/14 West Thames Area July 14

<sup>7</sup> Flood Alerts are issued when rivers are expected to overtop their banks, spill out into the floodplain and flood low lying areas, roads and gardens. Flood Warnings are issued when a river impacts areas of land and Property flooding is expected. Severe Flood Warnings should be reserved for exceptional flooding situations where there is significant risk to life or significant disruption to the community.

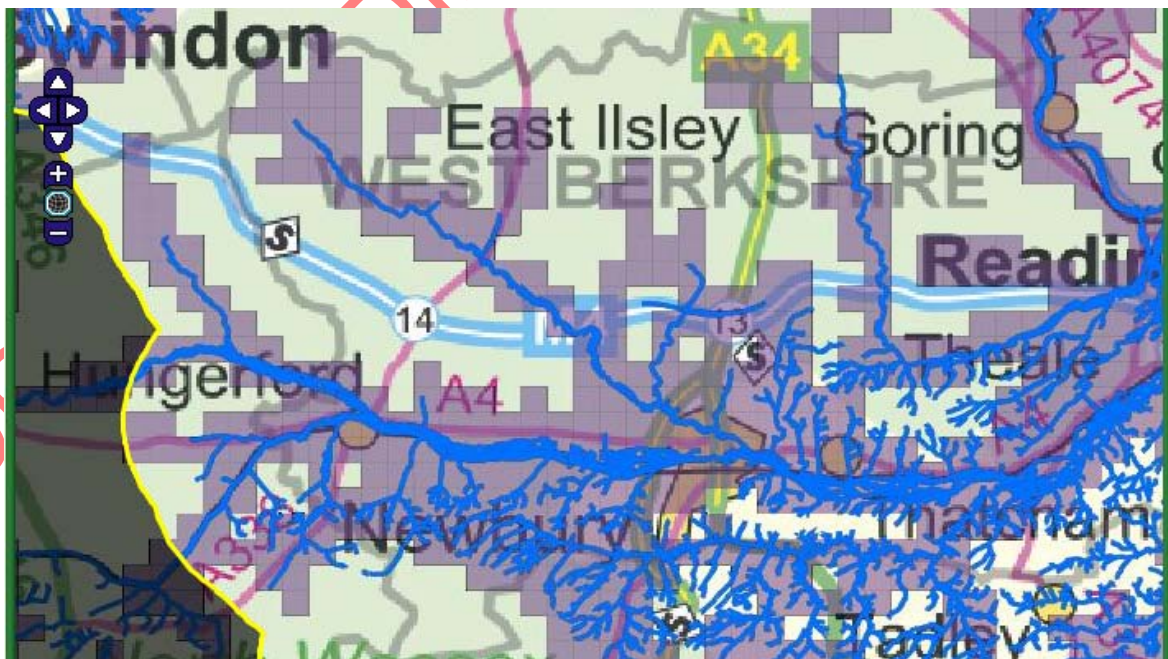
Warnings on these areas twice  
The communities along the River Thames experienced higher than ever recorded flows and the levels remained high for long periods of time. All the tributaries to the Thames were all flowing fast and high for several months.

#### Key Point 4:

- The number of flood alerts & warnings being put in place over the whole geographic area of West Berkshire was challenging to manage due to the different demands of the situation and the demands being made by communities at risk.
- Local knowledge of how the rivers respond and the potential key risk points is essential in any response. This knowledge is held by some WBC staff and the communities.
- Some communities on river systems either were not signed up to alerts from Environment Agency or did not take notice of the actions necessary in good time adding to the impact on the Council and demands being made.

### 4.3 Groundwater

4.3.1 West Berkshire, particularly the Downs areas, is an area susceptible to groundwater flooding due to the chalk geology forming aquifers. The map below shows the river systems across the area in blue and in purple squares the areas where groundwater can have an impact.



Source: Env Agency

- 4.3.2 The map shows that a significant area in the District is at risk of groundwater flooding. It should be noted that the Rivers Pang, Lambourn and Kennet are all groundwater fed rivers.
- 4.3.3 The impact of this groundwater can be both positive and negative in that in periods of low rainfall there is an option to abstract water to maintain flows and water provision via the utility companies. However the opposite is not so readily controlled in that following long periods of rainfall the aquifer fills up and is found to 'breakout' at the surface. This can result in flooding and the 'source' of the relevant rivers changing from 'normal' conditions as a result.
- 4.3.4 The impact can be repeated if during the intervening months of winter rainfall there is not time for the groundwater levels to reduce significantly. This was shown over the last 2 winters following 2 years of high rainfall resulting in 2 years of groundwater breakout and flooding.
- 4.3.5 In order to monitor and forecast the risk the Environment Agency has 2 main monitoring points in West Berkshire at the boreholes known as:  
 Longacre and Northfield Farm – Lambourn Valley catchment  
 Hodcott – West and East Ilsley and Compton - Pang Valley catchment
- 4.3.6 When the levels get to a certain point then the EA issue groundwater alerts. Below are the dates the alerts were put in place over the last two winters. Interestingly the dates the alerts were removed are very similar.

**Lambourn Valley groundwater alert**

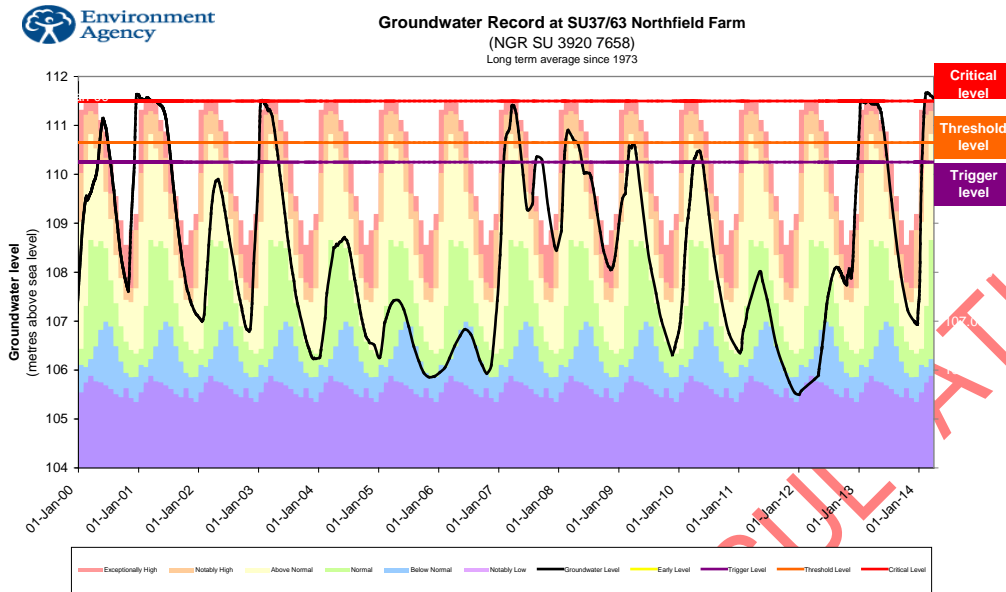
	<b>2013/14</b>	<b>2012/13</b>
Issued:	09/01/2014	04/12/2012
Removed:	28/05/2014 - 140 days	31/05/2013 – 178 days

**West and East Ilsley and Compton groundwater alert**

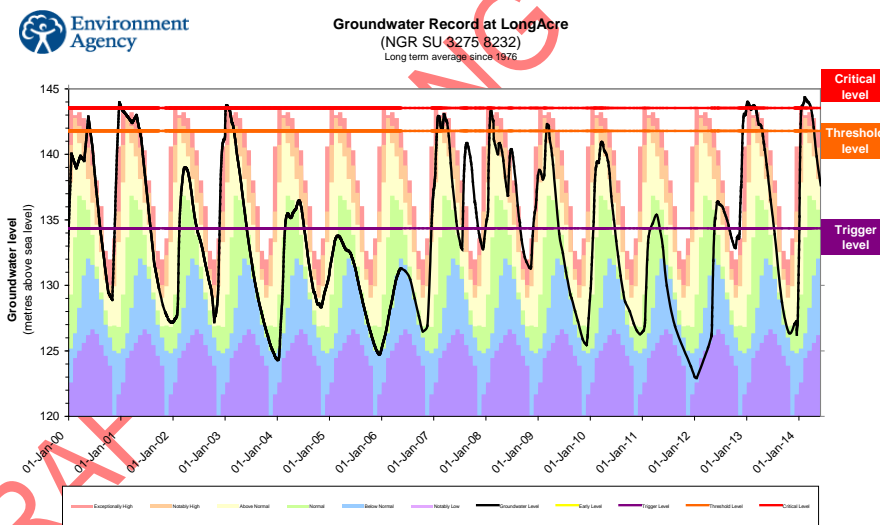
	<b>2013/14</b>	<b>2012/13</b>
Issued:	29/01/2014	02/01/2013
Removed:	28/05/2014 - 120 days	28/05/2013- 147 days

4.3.7 The charts below show the groundwater levels at the 2 bore holes since 2000.

**Chart 1 – Lambourn Valley Bore Hole (2000 – 2014)**

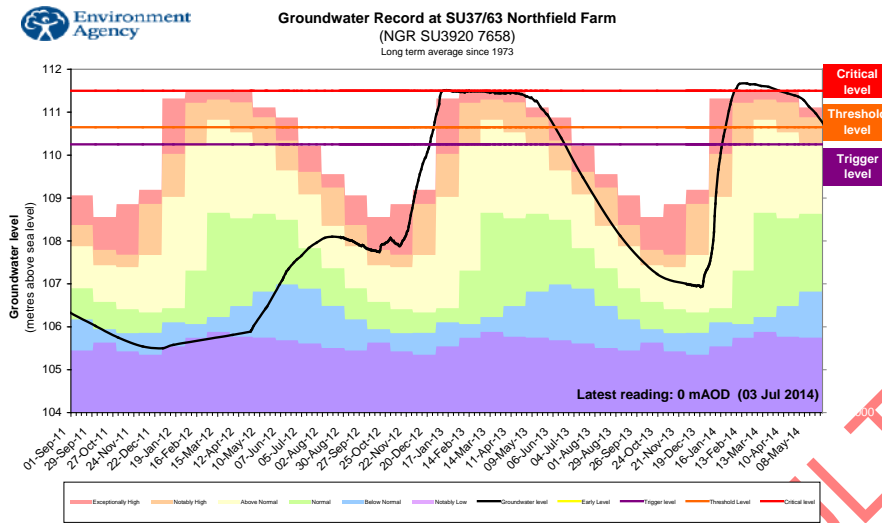


**Chart 2 Pang Valley Bore Hole (2000 – 2014)**

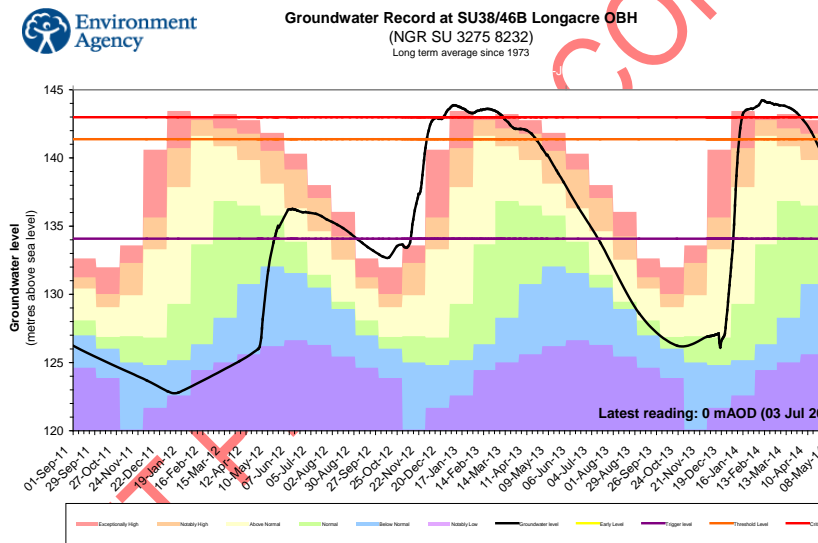


The charts below show in more detail the g/w levels since Sept 11 to May 2014

**Chart 3 Lambourn Valley Bore Hole Chart**



**Chart 4 Pang Valley Bore Hole Chart**



The above graphs show that in 2012 the groundwater levels did not go as far down as they have in the past, and although last summer (2013) the levels reduced more than in 2012 this was not as much as in previous years. This situation led to a risk over both these winters that with normal rainfall there would be some groundwater flooding.

The graphs also show that the levels of groundwater in 13/14 went above the 'critical' levels and therefore it can be assumed this is the reason the impact was greater in 13/14.



### Key Point 5:

- In both groundwater alert areas (Lambourn and Pang) the alerts were removed at almost the same time despite being 20 days apart in issuing.
- In 2012/13 the groundwater alerts were in for a longer period of time than in 13/14 although the levels in 13/14 were higher reaching 'critical' levels.
- The impact of the groundwater in 2013/14 was experienced over a wider area of the District than in 2012/13.
- The high groundwater levels and continued high rainfall in January- February 2014 led to significant flooding including problems relating to sewage.
- Decisions on the deployment of resources should be made by appropriate agencies based on evidence.
- The draft Groundwater Plan was implemented based on alerts raised by the Environment Agency.
- An early multi-agency response with EA, RBFRS, TW and Council is essential.
- Local knowledge and information is essential when levels are near to breaking

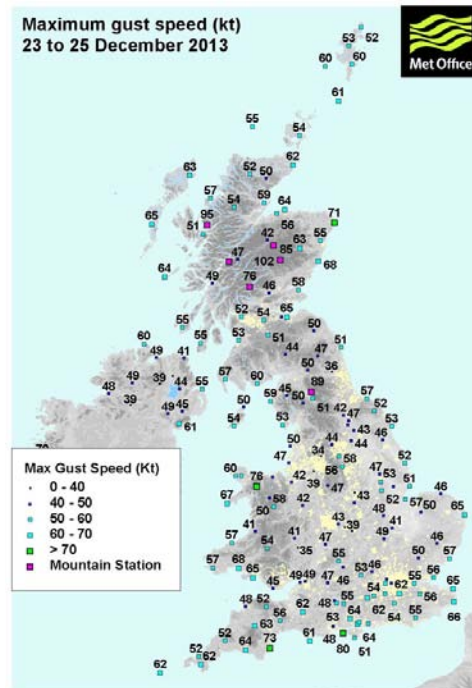
## 4.4 Storms

4.4.1 The impact of the storms across the UK were extensive, including the deaths of four people. There was severe disruption to transport with no trains, disruption on roads and reduced flights and ferries. Thousands of trees came down, some of which fell onto power lines leading to 600,000 homes left without power across the country.

4.4.2 The storms had an effect on the south of England and West Berkshire as detailed below:

23 - 28 Dec 2013	Caused widespread flooding across Southern England, causing power cuts, with around 50,000 homes remaining without power through the Christmas period. Rail services were cancelled due to fallen trees or flooding, Gatwick Airport was affected by flooding as were several areas in West Berkshire. Over 3300 properties had power outages in West Berkshire over 5 events including 331 with no power on Christmas Day
7 - 9 Feb 2014	50mph gusts of wind experienced.
12 Feb 2014	59mph gusts of wind experienced with a roof coming off a block of flats in Oxfordshire and many trees coming down across the Thames Valley
13- 15 Feb 2014	60mph gusts of wind experienced leading to hundreds of trees down; over 22297 properties had power outages in West Berkshire over 3 events. (see also 4.6.4)

4.4.3 The effects of these storms were experienced across the whole of the UK as shown by the Met Office map below:



Source Met Office

#### Key Point 6:

- The widespread nature and length of the storms and adverse weather meant that all utility companies were stretched to capacity.
- Greater information sharing across responding agencies about the deployment of resources would have helped to avoid duplication and made the response more efficient.
- Local progress reports from agencies or communities would have helped inform decisions in relation to the deployment of resources.
- A greater robustness of utility company information systems (Customer Services/Websites) would have been helpful for customers.

## 4.5 Impacts of the Adverse Weather on Communities

The impacts detailed below were detailed in the log or reported direct by officers on the ground.

### 4.5.1 Flooded Properties

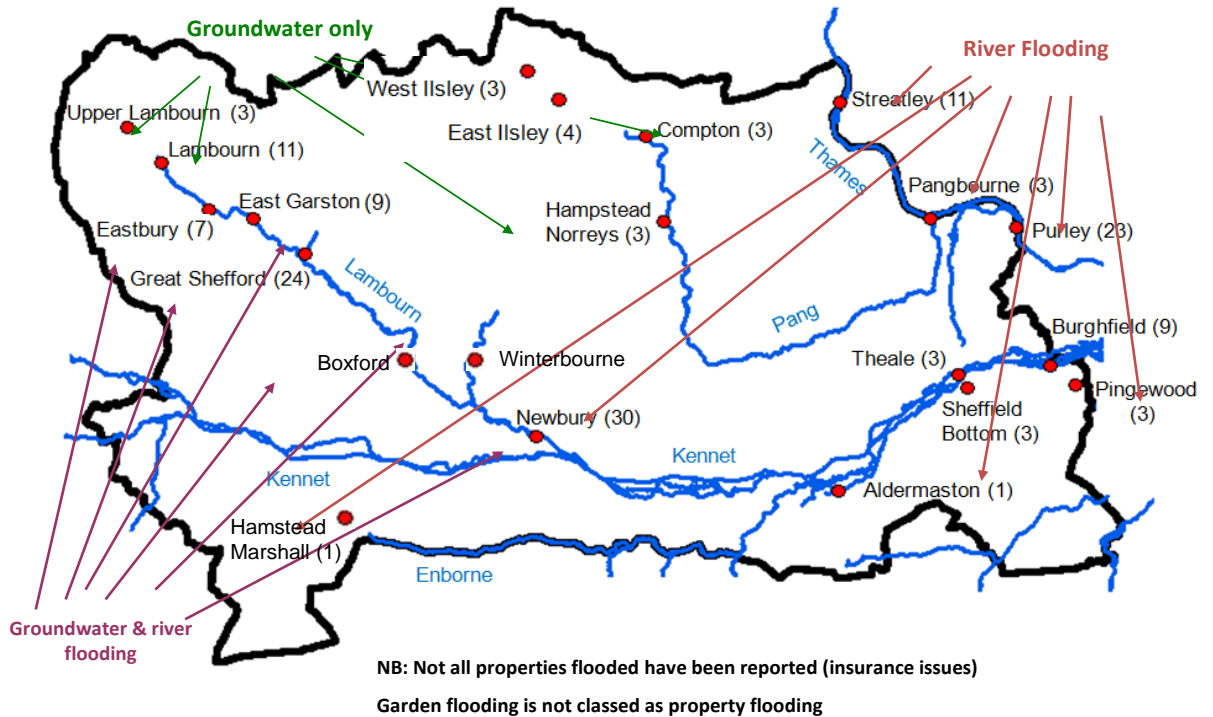
During the period 23 December 2013 to 11 June 2014 a number of commercial and residential properties were subject to varying degrees of flooding. In some cases particularly, in Purley on Thames, Theale, Pingewood and Holybrook areas, properties flooded at least twice if not three times as a result of the fluctuating levels of the rivers.



The Section 19, FWMA investigations prepared by the Highways and Transport Service will provide details of the reasons why properties flooded.

The exact number of properties flooded internally in the living or working spaces of dwellings and commercial premises is unlikely to be known in exact detail due to homeowners not making insurance claims and possibly 'blighting' their property in the event of them wishing to sell their properties in the future etc.

The map below shows the location of some of the flooded properties and the cause of the flooding in the area. Note not all flooded properties are identified on this map due to detail.



The information on flooded properties as at 11 June 2014 is:

- 271 Residential properties
- 45 Commercial properties

This compares with the National Figures as at June 2014 which were:

Numbers of households flooded – where water has entered the property since 5 December 2013	7,744
Numbers of businesses affected (including farms)	3,217

Based on 122 Local Authority returns therefore an average of 64 residential properties per Local Authority. (Source DCLG)

The impact on those directly affected by being flooded cannot be underestimated regardless of the source of the flooding. Not only in terms of finances in the short term but potentially the long term by not being able to sell their property and higher, insurance premiums. The loss of personal belongings can also be traumatic especially if they cannot be replaced. The psychological effects caused by flooding can also impact on families and can be triggered by families having to move out and

away from their home, the community, the work place and school. Families may also be required to live upstairs as repairs take place and this can have a negative impact on everyday life.

#### **Key Point 7:**

- Establishing a full picture of the actual number of premises impacted by flooding is difficult if not impossible due to the homeowners concerns about “blighting” their properties.
- Communities across West Berkshire will be impacted differently depending on the nature of the flooding.
- The impact on individuals who have gone through this crisis cannot be underestimated.

#### **4.5.2 Stranded Communities**

The overall number of properties flooded over the winter period was significantly lower than in 2007 when over 2500 homes were flooded. However in 2013/14 a far greater number of properties were surrounded by water although not flooding internally in the living space, some were surrounded and therefore ‘cut-off’ for a significant period of time. Some areas where this was evident included:

- (a) Purley on Thames
- (b) Eastbury, East Garston & Great Shefford
- (c) Pingewood
- (d) Burghfield Bridge, Holybrook
- (e) Shaw, Newbury

In these areas the water was lapping all around the house, was often below floor level and in their gardens.

A significant number of other areas almost became cut off due to the flooding on the road network resulting in a large number of roads being closed. Some communities that were affected or at risk included:

- (a) Two Rivers Way, Newbury
- (b) Kintbury
- (c) Aldermaston
- (d) Tidmarsh
- (e) East Ilsley
- (f) West Ilsley
- (g) Sulham
- (h) Great Shefford
- (i) Pingewood
- (j) Burghfield/Theale

The impact of these road closures on communities was significant due to:

- (a) Difficulties of getting in and out of homes,
- (b) Feeling of isolation,
- (c) Worrying about the levels of water getting into the house and the long term impact on the house structure,
- (d) Concerns about the contamination risks of the water,
- (e) Infiltration of the water into mains or private sewers,
- (f) Long term business impacts due to lack of access by customers

#### **Key Point 8:**

- Properties which are cut off but not flooded still pose a significant challenge for responding agencies.
- Homeowners cut off but not flooded still suffer from extreme anxiety when surrounded by water.
- Access for emergency services was also limited

#### **4.5.3 Damage to Farm Land**

The flood damage to land in particular farm land in the area was wide spread over the 4.5 month period.

Damage to land and soil structure from erosion and compaction was common on flooded land and will require remedial treatment with subsoiling in the spring or autumn before the next crop is planted.

Damage to crops varied depending on the duration of the flooding. In general arable crops which flooded for more than two weeks were unviable; however grassland often survived longer periods of flooding. There were instances of crop losses of field beans, oilseed rape and cereals; however most were redrilled with spring sown crops which mitigated the losses. Groundwater was an issue and caused soil erosion and crop losses in affected areas, although these were not widespread.

(Source ADAS)

#### **4.5.4 Power Failures**

Power failures due to power lines being damaged during storms were experienced throughout the winter period however the most significant period for West Berkshire was on 23/24 December 2013. During this period Scottish & Southern Electricity (SSE) received over 1000 reports of damage to the Southern Electricity Power Distribution (SEPD) network impacting over 180,000 customers across the country over the course of Christmas week.

In West Berkshire the following power outages were experienced:

Date	No out of power (new on that date)	Main areas affected	Return to normality
23 Dec	1174	Woodhays, Enbourne, Hampstead Marshall, Brimpton, Crookham	9850 out of power for over 6hrs 2115 out of power for over 12hrs 1034 out of power for 24hrs 309 out of power for 36hrs
24 Dec	547		22 out of power for 36hrs
26 Dec	445		19 were still without power 36hrs later.
27 Dec	978		All back on power between 12 – 24hrs
28 Dec	156		All were back on within 6hrs
13 Feb	421	Mortimer	All within 6hrs
14 Feb	5551	Thatcham, Crookham Greenham Leckhampstead Chaddleworth East Ilsley Eastbury South Fawley Great Shefford Lambourn East Garston	476 had power in less than 6hrs 663 had power in over 6hrs 3117 were still without power some 48hrs later
15 Feb	16325	Kintbury East ilsley Basildon Denford Lower Basildon Streatley Wickham Lambourn	8798 were still without power over 6hrs later 1307 were without power 12hrs later and 54 were without power 24hrs later

There were other dates over the winter where power outages were issues including 27 – 29 Oct (total 4306 without power). However the main impact of power outages in relation to the dates in the table including the knock on effect for those communities at risk of flooding and a significant number of residents without power over Christmas Day.

The impact of the power being off included the 'normal' lack of power issues:

- (a) No heating – a significant issue for vulnerable
- (b) No means of cooking
- (c) Many modern systems including phones, internet etc need power to operate

Furthermore, many generators used to pump water out or away from homes were electrical. There were unable to be used due to losing power.

#### **Key Point 9:**

- Information about power outages was difficult to access and this had an impact on the deployment of resources. The SSE website was not fully operational over the period of the outages.
- Establishing a definitive list of all people who were vulnerable from SSE, WBC and other agencies lists is important and needs greater information sharing to take place.
- Excellent community spirit was in evidence with many people helping out their immediate neighbours. Local Public Houses and the Military also provided hot food, drinks and warmth for those affected.
- The time of year has a major impact on the expectations of residents – i.e. Christmas and winter.

#### **4.5.5 Fallen Trees**

During the winter period 179 trees/shrubs were reported to the Council to have fallen. Many more had fallen but were on private land.

The majority of the trees reported were as a result of them falling over roads or footpaths resulting in a risk to the public if they were not cleared.

Some fallen trees and tree debris created secondary issues by taking down power lines; falling into rivers or trash screens and therefore restricting the flow of water.

#### **Key Point 10:**

- Whilst a large number of trees/shrubs were reported these were cleared from the road network quickly in a coordinated way by the relevant contractors and in some cases community support.

#### **4.5.6 Damaged to Roads**

During the floods (for the purpose of this report from 1 December 2013 – 31 May 2014) the reported damage impact on the Highways network included:

- (a) 22 Road Closures
- (b) 2 Underpass Closures (Newbury)
- (c) Damage across the district to the road surface including 33,919m (33km) of road surface made up of damage to the infrastructure generally and over 578 potholes.
- (d) Over 100 additional 'flood' signs had to be sourced due to the number of flood risks on roads across the district area.

The impact on the community in relation to the closures at the time of the incident meant that some communities or parts of communities were isolated. There was also the issue of people driving through flood water too quickly putting themselves at risk and causing bow waves which was adding to the flood risk to properties.

There was also the knock on effect to Thames Valley Police (TVP) & Royal Berkshire Fire & Rescue Service (RBFRS) due to people ignoring the road closures or removing the signage, not putting it back and then drivers behind being caught in flood water. This resulted in a number of cars being stranded and the emergency services being called upon to rescue them. The outcome was additional resources being supplied to bolster some road closures by way of 'hard' closures or additional resources by way of police staff.

There was also the impact in relation to insurance claims to the Council in relation to damage caused during the floods.

The details below show the claims numbers in relation to potholes etc. It should be noted there has been a reduction – in part since cold, ice and snow has more of an effect on the roads than flooding only which was the main cause of road damage in 2013/14.

1/11/12 – 31/7/13      400 claims

1/11/13 – 28/7/14      218 claims

#### **Key Point 11:**

- The expectation of the public is that repairs to roads will be undertaken immediately even when they are still under water.
- The publicity and management of road closures including the associated risks of driving through flood water needs to be improved.

#### **4.5.7 Damage to Public Rights of Way**

The effects of the flooding on the Public Rights of Way (PROW) is still being determined since it is only now in the summer months that some of the footpaths are being walked and the damage found.

The impact of flood damage to PROWs is not insignificant both during the flooding period and thereafter.

During the flooding period 51 PROW were formally closed due to the risk to users. In Oxfordshire 2 people died directly as a result of using flooded PROW despite signs advising to the contrary. All of the PROW in West Berkshire have been visited and reopened although some repairs are still underway.

It is estimated that approx 2045m of PROW was damaged by the floods. Whilst this may be relatively small in the total length of PROW in West Berkshire (1173km) it should be noted that for one length of PROW of only 600m at Streatley Footpath 25 the cost for repair is estimated to be hundreds of thousands of pounds. So the effect on the area and potentially to tourism is significant.

Some of the damage was as a result of flooding directly with other damage on the PROWs reported due to trees problems adversely affecting PROW. Between 23 December 2013 and 30 May 2014 130 reports were received in relation to trees damaging PROW.

#### **Key Point 12:**

- The effects of the damage to PROW are not immediately evident and can take time to establish.
- Further work is needed to deter members of the public from ignoring closure signs and the potential dangers of taking this course of action.

#### **4.5.8 Damage to West Berkshire Council Buildings**

No major flood or storm damage occurred to West Berkshire Council buildings however there were some minor issues including:

- 5 x roof leaks internally at schools
- 1 x power cut at a school
- 2 x near misses to flood damage averted by sandbags
- 1 x near miss at a Care Home –averted by sandbags and an Evacuation Plan on standby
- Newbury Library was damaged by winds on Friday 14th February with slates being blown off the roof. This resulted in closure of the library from Saturday 15th to Thursday 20th inclusive, and a one day closure on Friday 28th while repairs were carried out.

#### **Key Point 13:**

- When weather alerts are issued, as part of the Adverse Weather Plan, all services are alerted and those responsible for Council buildings are able to put checks in place to mitigate the risk of damage. This appeared to have been effective.

#### **4.5.9 Damage to Other Infrastructure**

##### **4.5.9.1 Sewer Systems**

The Thames Water sewer infrastructure experienced difficulties over the winter months mainly due to groundwater infiltration of their systems. This meant that many sewers were full to capacity and overflowing out of manholes or on occasions into peoples' homes. This was despite the majority of the sewage treatment and pumping stations operating well beyond their designed capabilities.

The knock on effects of this on the community included:

- (a) Sewage surcharging from manholes.
- (b) Sewage surcharging in homes.



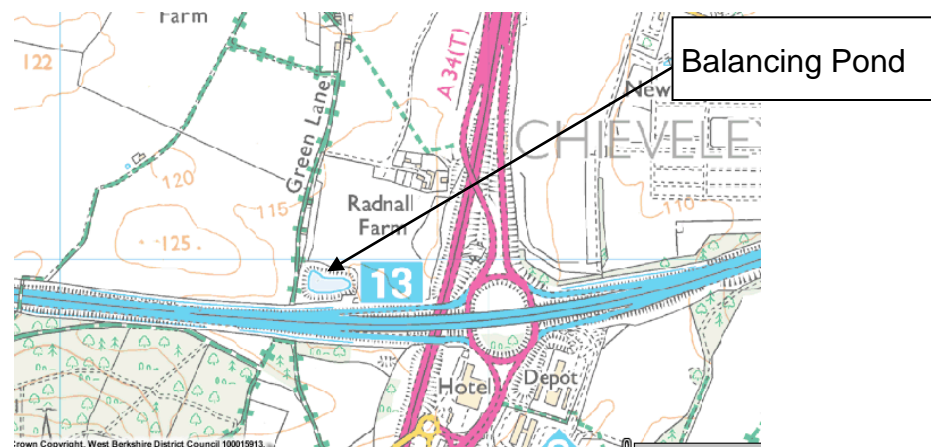
- (c) Sewage contamination of gardens, roads and footpaths.
- (d) Reduced or no ability to use the waste systems in homes.
- (e) Portaloos (provided by West Berkshire Council) being supplied to West Ilsley, Eastbury, Great Shefford, East Garston, Hampstead Norreys and Shaw.
- (f) People using camping toilets.
- (g) Concerns about contamination of the area – the roads, the rivers, homes.
- (h) Concerns about increased risk of disease as a result of the above to humans and animals.

#### Key Point 14:

- Residents and communities were confused about agency responsibilities and this meant that many contacted the Council looking for a response to Thames Water Sewage related issues.
- There was a lack of clarity as to who was responsible for provision of portaloos and support to the communities. Thames Water made a decision not to provide portaloos whereas Southern Water did.
- Clearer messages were required about the risks that sewage presented to health.

#### 4.5.9.2 *Highways Agency Infrastructure*

During the flooding in February it was highlighted by the Highways Agency that the balancing pond that receives water pumped from the A34 was very full and at risk of overflowing. In so doing the impact could have been flooding to Chieveley village and on the strategic networks of A34 and M4 which would have had a significant impact on the transport network in UK. It was agreed that pumping should take place but a coordinated multiagency approach was adopted in order to keep network operational and reduce the risk of property flooding.



#### **Key Point 15:**

- The early alerting by the Highways Agency of the potential problems associated with the balancing pond meant an early multi-agency joint working approach could be put in place to manage the problem

#### **4.5.9.3 Electricity Sub Stations and Grid Sites**

There are numerous sub stations and some grid sites within West Berkshire which Scottish & Southern Electricity has to provide the power to all the users in the area.

During the floods & storms some of these were affected directly by being flooded or hit by debris/trees and therefore causing power outages. Some of the most significant power outages were in the areas affected by groundwater. The combination of no power to pump flood water and the electrical pumps not operating meant that the risk of property flooding increased.

A strategic site that was impacted was a Grid Site near Pingewood. This had been affected by flooding in 2012 and had had more resilience measures put in place including alternative means to switch power from to support communities; raising some equipment etc. Other multi-agency support was also put into place to support this site in 2013/14 by way of High Volume Pumps (FRS) and blocking off a breach in the Kennet (Military on behalf of WBC)

#### **Key Point 16:**

- Whilst lessons had been learnt by the utility company some of the recommendations of the S19, H&T report of 2013 had not been completed by all agencies especially the Canal and River Trust.
- The engagement work undertaken with SSE following the event in 2012 meant that there was a greater understanding by all of the risks, the impact and what could be done to prevent the site being lost which could have a significant effect on the power supply to the East of West Berkshire area and significant areas of Reading.

#### **4.5.9.4 Railway Services**

The station at Newbury was affected by flooding due to 2 issues:

- (a) Flooding on the lines – along the network from Paddington to the west of the area.
- (b) Flooding of the Southern platform due to water and sewage running on to it – resulting in the platform closing on safety grounds.

The impact of this situation included:

- (a) Reduced services for the company
- (b) Reduced services for the rail users.

- (c) Some users being stranded
- (d) Additional road use

#### 4.5.9.5 **Underground Infrastructure**

Much of the utilities essential for normal day to day operations are below ground level e.g. communication cables. Therefore the impact of groundwater can have a significant effect on them and therefore have a knock effect on the communities. Part of Great Shefford in March was without landline phones due to the BT infrastructure being affected by groundwater.

#### **Key Point 17:**

- A greater understanding of the utilities and transport companies resource locations is required particularly if they are impacted.
- The early joint working by the Council and utilities in relation to a groundwater issue in Newbury allowed for more detailed planning should the situation deteriorate.

DRAFT PENDING CONSC

## Section 4 - Adverse Weather Event Management

This section describes the preparations to manage risk, the plans in place, the time line of events, the command and control, how this incident was coordinated from a multi-agency point of view. This information was sourced from Thames Valley LRF, professional partners directly and the Council Services as part of their debrief process.

### 1. Response Preparation

- 1.1 Under the Civil Contingencies Act 2004<sup>8</sup> there are a number of duties placed upon the Council including the need to undertake a risk assessment of the geographic area and to prepare emergency plans.
- 1.2 The National Risk Assessment (NRA) and Local Risk Assessment Guidance (LRAG) is provided by Central Government and provides the national picture on the likelihood of hazards including risks that would be significant at a local but not necessarily at a regional to national level. The assessment of impact is conducted by the Local Resilience Forums
- 1.3 The Assessment of Risks and impacts are carried out annually as part of the Thames Valley Local Resilience Forum (TVLRF)<sup>9</sup>. Of the 80 identified risks to the communities there are 11 identified in the Thames Valley as being very high. Of these 11 Very High Risks in the Thames Valley 5 relate to weather, 3 of which relate to flooding risks.
- 1.4 The Thames Valley Local Resilience Forum (TV LRF) has recognised that flooding is one of the major concerns for the communities and responding agencies and have a number of plans in place to support the response to such incidents including:
  - (a) TVLRF Multi-Agency Procedures-Emergencies
  - (b) TVLRF Adverse Weather Plan
  - (c) TVLRF Flood Plan
  - (d) TVLRF Evacuation and Shelter Protocol
  - (e) TVLRF Humanitarian Assistance Framework
  - (f) TVLRF Recovery Plan
  - (g) TVLRF Communications Plan
  - (h) TVLRF Vulnerable Persons Framework
  - (i) Environment Agency Flood Warning Plans
  - (j) Environment Agency Local County Flood Warning Plans
  - (k) Environment Agency Incident Management Plans
- 1.5 West Berkshire Council (WBC) also has a number of plans that support the response and recovery of flooding events including:
  - (a) WBC Major Incident Plan

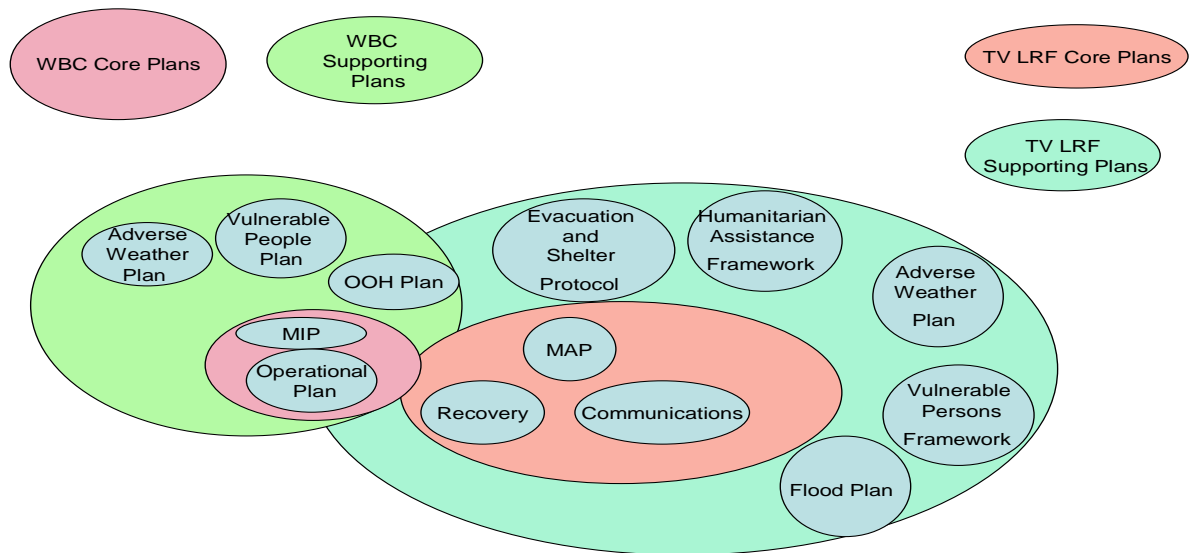
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<sup>8</sup> <http://www.legislation.gov.uk/2004?title=Civil%20Contingencies%20Act%20>

<sup>9</sup> [Thames Valley Local Resilience Forum -Community Risk Register](#)

- (b) WBC Adverse Weather Plan (with storm, heatwave, snow, drought and flooding sections)
- (c) WBC Operational Guide Plan
- (d) WBC Out of Hours Plan
- (e) WBC Vulnerable People Plan
- (f) Berkshire Local Authorities Memorandum of Understanding

1.6 The diagram below shows how the plans are integrated:



1.7 The plans aim to provide an integrated framework as to how all responding agencies will react to an emergency and their roles and responsibilities

1.8 In addition to the agencies plans there are a number of written community emergency or flood plans including:

Community	Status of plan
Great Shefford	2011
Boxford	2013
Aldermaston	Draft 2013
Bucklebury	2010
Pangbourne	Draft
Theale	2007
Holybrook	2012
Shaw –cum-Donnington	2013
Lambourn	2011
East Garston	2009
Purley on Thames	2013
Thatcham	2009
Sulhamstead	draft

1.9 These community plans provide a means for local people to organise themselves, coordinate issues in their communities and improve communications routes within West Berkshire Council and other agencies.

## 2. Partnerships in place

2.1 In order to improve any response to a Major Incident having existing partnerships, knowledge and understanding in advance is essential. This has been recognised by the Council and built on over several years. Some of the partnerships and groups in place include:

- (a) Thames Valley LRF (Executive)
- (b) Thames Valley LRF (Planning & Delivery Group)
- (c) Thames Valley LRF (Adverse Weather Group)
- (d) Berkshire LA Emergency Planning Group (LA's only)
- (e) Berkshire Resilience Group (Multi-agency)
- (f) West Berkshire Council Emergency Planning Liaison Group (with reps from all Services)
- (g) West Berkshire Council Flood Group
- (h) Lambourn Valley Flood Forum
- (i) Pang Valley Flood Forum
- (j) Thatcham Flood Forum
- (k) Newbury Flood Forum
- (l) Streatley Flood Forum (new since floods)
- (m) West Berkshire Flood Wardens

2.3 The purpose of many of these groups is to coordinate the planning of major incidents, in particular, in writing response plans. In addition, there is the opportunity each year to do training and exercising of these plans in order to develop responders learning, a key element of which is meeting other responders and understanding how all agencies can work together in major incident situations.

### Key Points 18:

- There are a large number of plans which support a major incident response. These plans are not known or read in detail by most staff that supported.
- The sharing of some plans is limited due to the contact details held within them.
- Tactical Advisors (TACADS) were an essential part of the response and provided support those officers involved with less detailed knowledge.
- The work in advance with partners and groups paid dividends during the response and recovery and should be built on.

### 3. Timelines of events

3.1 This adverse weather event was building up for some time as detailed in Section 2.

3.2 The following sets out the outline of actions for this incident.

(a) **Preparations**

This involves reviewing plans following the previous events/incidents; engaging with professional partners and ensuring all the resources (staff and equipment) are prepared.

As a situation occurs either without warning 'big bang' or a 'rising tide' event then more plans are put in place as necessary.

The preparations for this winter included a review of last years events, amendments to plans etc. In addition there were action plans developed which were being progressed.

As the risk of flooding became more likely at the end of December 2013 more preparation, alerting of services and communities took place.

(b) **Response**

The response to this incident 'started' on 23 December 2013 when the first number of flood alerts and warnings were issued. The following sets out some of the key milestones and actions by the Council in the response process:

Dates	Actions	Plans involved
23 Dec 2013 – 22 Jan 2014	Dialling into the Thames Valley multi-agency teleconferences.	TV LRF MAP TV LRF Flood Plan
	Warning and Informing communities via contact (normally by email) with community flood wardens where they are in place; Parish Councils and Ward Members.	WBC Adverse Weather Plan
	Coordinating the local response based on priorities and risk – initially coordinated by Civil Contingencies working extended hours. This involved meetings with relevant services - either by email and/or meetings.	WBC Adverse Weather Plan
	Specific teleconferences with EA, Thames Water and the Council when the groundwater alerts were issued.	WBC Draft Groundwater Plan
	Response in relation to specific issues – particularly River Thames and Lower Kennet	WBC Adverse Weather Plan WBC Flood Plan
1 Feb – 6 Feb 2014	Mini Emergency Operating Centre (EOC) operating and staffed by Civil Contingencies Team and some other officers from other services.	WBC Major Incident Plan



Dates	Actions	Plans involved
7 Feb 2014	<p>Due to increased issues the team managing the situation needed to expand as the situation was forecast to deteriorate so the group moved to the EOC location in readiness as discussions concerning the situation continued.</p> <p>A multi-service meeting was held to confirm readiness across the Council.</p>	<p>WBC Major Incident Plan</p> <p>WBC Adverse Weather Plan</p>
	<p>As the situation deteriorated with respect to groundwater flooding and the forecast for significant storms in February it was clear that the resources being deployed at that time required support as a result on 7 February 2014 a Major Incident was declared in West Berkshire</p>	<p>WBC Major Incident Plan (WBC MIP)</p>
8 Feb 2014	<p>Strategic Coordinating Centre (SCG) declared Major Incident for Thames Valley Area</p>	<p>TV LRF MAP</p>
7 Feb - 24 Feb 2014	<p>Emergency Operational Centre fully operational 24/7 with support from Military &amp; TVP</p>	<p>WBC MIP</p> <p>WBC Operational Manual</p>
14 Feb – 24 Feb 2014	<p>Due to the number of agencies involved in the EOC it was too busy as an EOC due to all the Liaison Officers and the forecast of more storms a WBC Tactical Coordinating Centre (TCC) at WBC Offices stood up formally and staffed from a number of agencies.</p>	
19 Feb 2014	<p>Notification by Env Agency of groundwater alert to Newbury</p>	<p>WBC MIP</p> <p>WBC Operational Manual</p> <p>TV LRF Evacuation Plan</p>
24 Feb – 11 Jun 2014	<p>Operating remotely in response to specific flood issues</p>	
21 Feb – ongoing	<p>Staggered recovery process.</p>	<p>TV LRF Recovery Plan</p>

(c) **Recovery**

The recovery phase commenced on 21 February 2014 across the Thames Valley. However in West Berkshire this started in March although in some areas such as Purley on Thames it was slightly earlier.

**Key Points 19:**

- The Council managed the impact of the early flooding prior to the declaration of a Major Incident. Co-ordination involved a core team of officers working remotely in their own services. At this time some staff and contractors operated for long hours over a prolonged period of time to manage the situation.
- The trigger point for declaring a Major Incident was additional adverse weather due and the assessment of the resources likely to be required over and above those already operating. This included the need for a 24/7 operation EOC.

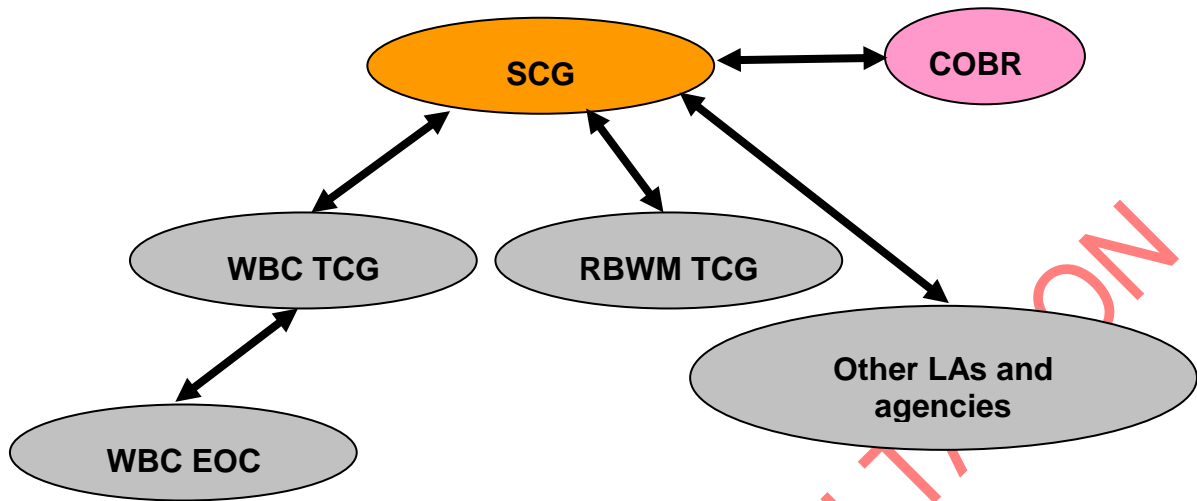
**4. Command & Control Arrangements**

4.1 In any emergency the structural arrangements are important in order to ensure everyone knows what is happening, what needs to happen, the priorities and key public messages. The way this was set up for this incident was as follows:

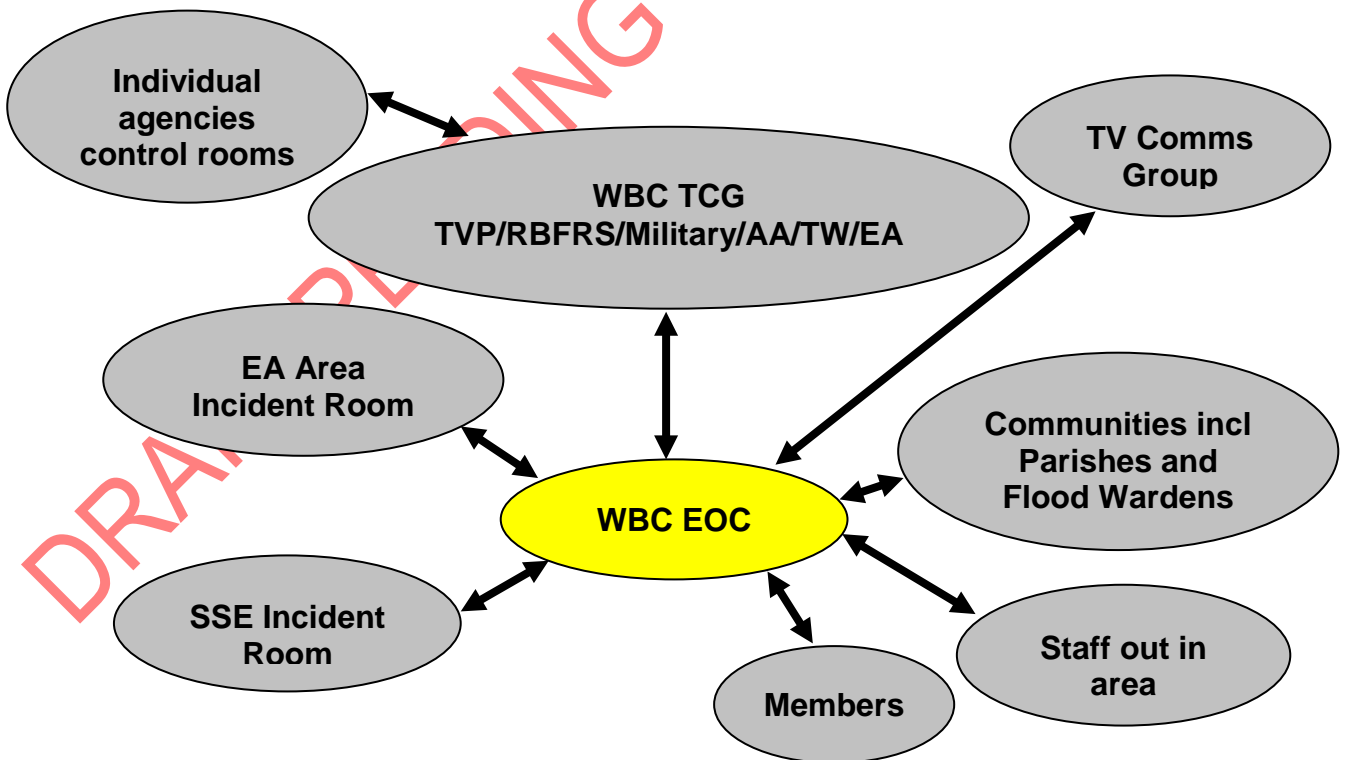
Command & Control Mechanism	Activities and WBC Role
Multi-agency Teleconferences	<p>As per the TV LRF Multi-Agency Procedures and the Adverse Weather Plans Teleconferences are put in place at defined trigger points in order to ensure all agencies are aware of issues etc. There is a process for this including template agendas etc.</p> <p>Initially these were run by the Env Agency however as the issues increased the role of running the teleconferences was with TVP.</p> <p>These teleconferences ran from 23 December 2013 until end of February 2014, with a small gap in January 2014.</p> <p>There were a number of different telecoms put in place in February 2014 due to the escalation of the situation.</p>
EOC	<p>A 'mini' EOC was operating out of Market Street Offices coordinating the response of the Council.</p> <p>On 7 February 2014 a full EOC was put in place with all roles operating to coordinate the role of the Council in support of the community.</p>

Command & Control Mechanism	Activities and WBC Role
	<p>This had a number of Liaison Officers in attendance from 8 February 2014 from the Military and TVP.</p> <p>The EOC is an officer lead control room.</p> <p>More details in relation to EOC are set out in this section pt 5.</p>
Tactical Coordinating Group (TCG)	<p>A multi-agency TCG was set up in the Council Offices adjacent to the EOC. This was the first time this had happened and was arranged on the basis of necessary communications with the EOC, IT capability etc.</p> <p>The TCG was lead by TVP with support from:</p> <ul style="list-style-type: none"> <li>• West Berkshire Council Silver Liaison Officer</li> <li>• RBFRS –Silver Officer</li> <li>• Military Liaison Officers</li> <li>• EA</li> <li>• Automobile Association Specialist Operational response Team (AA Sort)</li> <li>• Thames Water</li> </ul> <p>The role was to support by way of coordinating the multi-agency response to the incident.</p> <p>(A further TCG was in place in Windsor)</p>
Strategic Coordinating Group (SCG)	<p>An SCG was put in place at TVP Headquarters lead by an Assistant Chief Constable (ACC).</p> <p>There were some specific agencies on site the majority of agencies were dialling into the SCG meetings on a twice daily basis.</p> <p>The purpose of these meetings were to ensure the strategic intentions were being managed, identify any new issues so as to prioritise resources and to ensure the information going to Government was clear in the Commonly Recognised Information Picture (CRIP).</p> <p>Prior to the TCG being set up the representative from West Berkshire was the EOC Controller with support from a Tactical Advisor. When the TCG was in place the lead was the TCG Chair with support from the EOC Controller/WBC LO and other agencies as necessary.</p>
Recovery Coordinating Group (RCG)	<p>A RCG was put in place when the SCG handed over from response to recovery across the Thames Valley. Details of the recovery arrangements are set out in this document.</p>

4.2 Pictorial Diagram of the Command and Control arrangements:



4.3 In more detail the links with other agencies and WBC is set out below:



### **Key Points 20:**

- The key strategic plans in place were followed.
- The whole operation was complex with new processes being added during the event eg Sandbag Cell.
- Scalable approach was put in place so as not to impact on the whole Thames Valley agencies too early, hence TV LRF Tactical Teleconferences etc.
- The full WBC TCG was set up approx 7 days later than it could have. The interim situation was for multi-agency responders to join in with the EOC staff. This became too crowded and unworkable hence the move to a separate WBC TCG.
- Some agencies (TW & EA) took some time to provide representation into the WBC TCG. Their input when present was noticeable and positive.
- The impact of senior officers from the Regional EA offices going outside the communications chain direct to politicians created difficulties.
- The arrangements of the WBC TCG adjacent to the WBC EOC was positive.
- The routine for the days were set out clearly at an early stage along with the strategic intentions
- A clear communications route with contact details between Control Rooms needs to be put in place at an early stage – ideally with generic contacts rather than individuals details to ensure all the appropriate information is passed to all the relevant agencies and control rooms.
- Some Environment Agency and TV LRF led teleconferences were poorly managed such that:
  - They were too long in duration.
  - Notes/minutes took too long to be distributed.
  - Not all the relevant agencies were on the teleconferences

## **5. WBC Emergency Operations Centre (EOC)**

- 5.1 When the Major Incident was declared on 7 Feb 2014 the EOC was established on a formal basis. Some of the key points in relation to the centre are detailed below:
- (a) Set up - When the major incident was declared the full EOC was in place within 30 minutes.
  - (b) Roles put in place. As per the Major Incident Plan the roles that were put in place included:
    - Controller

- Loggist
  - Deputy Controller
  - Welfare Officer
  - Logistics Officer
  - Operations Officer
  - Highways Officer
  - HR Officer
  - Tactical Advisor
- (c) Shifts - The 8hr shift pattern put in place for the 24/7 operation was:
- 0800- 1600hrs
  - 1600 – midnight
  - Midnight to 0800hrs
- (d) Staffing - The EOC was operating 24/7 from 7 February to 21 February 2014. For each shift staff were put in place for all the roles. Initially the staff targeted were those that had undertaken Emergency Planning and EOC training. However due to the intensity of the response, some untrained staff were involved so as to keep business as usual activities underway.
- (e) Each shift was initially staffed 100% and for all daytime shifts this was necessary. However for some late shifts and the night shifts people were stood down on the basis of need – ideally in advance of the shift but some were stood down during the shift due to the requirements at the time.
- (f) A total of 176 staff were placed shifts, some of which were stood down but they were available.

Of these 176 staff:

- 15 did 2 shifts
- 15 did 3 shifts
- 6 did 4 shifts
- 4 did 5 shifts
- 22 Stood Down

Over 360 staff volunteered so not all were given a shift.

The staff came from across the Council as shown below:

Directorate	Nos.	Service	Nos.	Stood down	HoS	% of service volunteering
Resources	354		63	8		18
		Strategic Support	19	2	Y – 3	37
		ICT	12		Y – 2	20
		Finance	7	3	Y – 1	13
		Public Health & Wellbeing	5		Y – 1	63
		Customer Services	10	2	Y – 3	8
		HR	7		Y – 2	23
		Legal	1	1	N (Stood down)	5
Environment	402		63	9		16
		Culture & EP	27	6	Y – 5	14
		Planning & Countryside	17	2	Y – 1	18
		Highways & Transport	18	1	Y- 1	16
Communities	797		48	7	Director	6
		Adult Social Care	10	1	Y – 3	3
		Education	12	3	Y – 1	7
		Children Services	9	2	N – 0	5
		Care Com, Housing & Safeguarding	15	1	Y - 4	22
		ASC Efficiency	0		N- 0	0

The Head of Strategic Support and the Civil Contingencies Team provided a presence and support to the EOC on a daily basis.

It should also be noted that in some of the communities directorate there were a number of staff who fulfil critical functions e.g. carers etc who have a roll in emergencies but not in the EOC.

(g) Daily Routine.

The 'routine' for the EOC apart from shift changes involved:

- Change of shift briefings
- WBC TCG Meeting 0730
- TV TCG telecom 0800



- SCG Telecom 1000
  - WBC TCG meeting 1500
  - SCG Telecom 1600
  - WBC TCG meeting 1930
- (h) Welfare of Staff in EOC
- Due to the intensity of the incident and timings of shifts it was difficult for staff in the EOC to take 'normal' breaks. As a result a decision was made to provide refreshments for staff in the EOC. This was carried out for lunch and evening meals.
- Post the incident welfare/counselling support was made available to all involved.
- (i) External communications were in place using phone, mobiles and airwave radios. The airwave radios were used to talk directly and securely to officers out on locations in West Berkshire and to officers across Berkshire where support was being provided.
- (j) Customer Services operated every work day and an additional day on Sat 8 Feb in support of the EOC taking calls from the public.

#### Key Points 21:

- The basics of the EOC arrangement worked well.
- Some areas to be improved for the future include:
  - Greater clarity over the roles and responsibilities of everyone in the EOC
  - The suitability of some staff to work in the EOC – their understanding and competence
  - Staffing of the EOC (most experienced v new; same people v different people in relation to those who volunteer)
  - The shift patterns including the length of shifts
  - Staff training for each of the roles
  - Welfare considerations
  - Information management system
- The willingness of staff to support the EOC or their colleagues in the office was exceptional
- The use of the Airwave radios became more valuable as officers used them more confidently.
- A Tactical Advisor (someone who is more aware of the plans, the responders and implications to support the decision making of the Controller) in the EOC should be considered
- There was a real 'buzz' of the team all working together to resolve emerging issues etc.

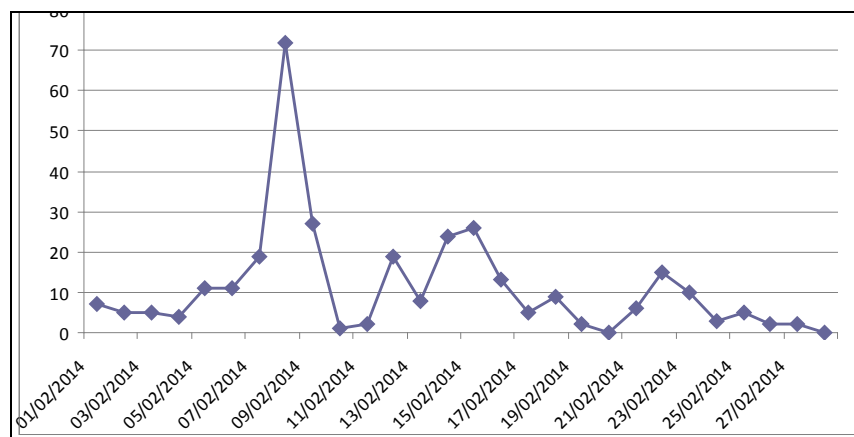
## 6. Information Management

6.1 During any incident a large amount of information is provided in and out of the EOC. For the period the EOC was open the following volumes of data and requests were made to the Council:

- (a) Phone calls: 1537 phone calls into the EOC phone lines
- (b) Emails received and sent. Over 8000 emails received. This does not include emails to individual offers or emergency planning:

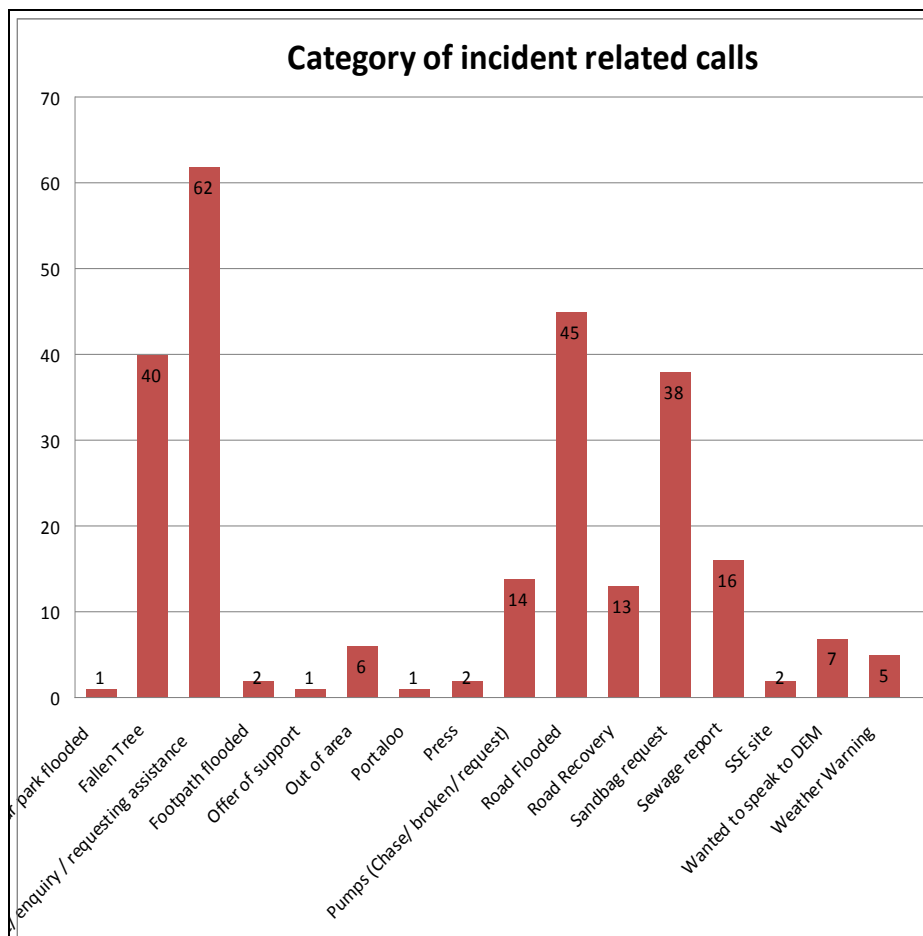
Mailbox	Sent	Received
Controller	4856 (some auto forwards)	2238
Deputy	361	760
Operations	271	611
Welfare	276	495
Logistics	95	254
Information	341	1980
Admin	265	1740

- (c) 1500 requests for support, providing information etc logged and actioned.
- (d) Out of hours calls. Overnight on 7/8 February the OOH contact centre was operating with the number of calls received shown on the graph below. The report indicates a significantly lower number of calls for the rest of the period if not 0 calls. This was because the EOC was operating and taking the calls.



Source: Civil Contingencies Team

- (e) Of the calls received during the 2 week period the breakdown of the calls received is set out below:



Source – Customer Services

- (f) The calls received by the Council were not too dissimilar to other years in total:

Customer Services Calls Received							
Year	2008	2009	2010	2011	2012	2013	2014
Jan	5328	5766	8325	4359	4081	5786	4242
Feb	4715	7535	3368	2801	3422	3503	4308
<b>Total</b>	<b>10043</b>	<b>13301</b>	<b>11693</b>	<b>7160</b>	<b>7503</b>	<b>9289</b>	<b>8550</b>

6.2 The requests and information provided was logged on a running excel spread sheet to monitor for actions being completed by the loggist.

### Key Points 22:

- There is a need to review the information management system used in the EOC.
- The calls received were sometimes not related to West Berkshire Council e.g. sewage issues which had to be re-directed to the appropriate agency.
- The calls overall in to the Customer Services did not increase over the same period as to other years. The calls relating to other issues decreased overall.
- Too many phone calls and emails were received directly into the EOC from members of the public instead of first going through Customer Services where they could often be dealt with, allowing the EOC to coordinate the responses.

## 7. Members

- 7.1 Visits by Members to the EOC was effectively managed by having a duty Member designated as the lead contact for the EOC.

### Key Points 23:

- This was a new initiative which worked well and enabled the EOC to focus on the task in hand.
- Daily updates were provided to Members.
- Members were engaged in the process and supportive to the response

## 8. Inter-agency Working

- 8.1 The response to the flooding was a multi-agency response with the following agencies supporting the Council:

Royal Berkshire Fire & Rescue Service	Thames Water
Other fire services from across UK including lead officers for HVP's	SSE
Thames Valley Police	Vodafone
Environment Agency	BT
Military: Royal Navy from Portsmouth Army from 7 Rifles, 4 Rifles and 42 Engr (GEO) RAF from Brize Norton	Highways Agency AA Special Operations Response Team (SORT)

#### **Key Points 24:**

- Good overall multi-agency response.
- Assistance provided by the military was welcomed both from the Council and partners but also the communities. Integrating the military into the command and control systems needs further work.
- The coordination and support of national assets worked well.
- Further work with the Environment Agency is required to ascertain whether practical engineering solutions to an imminent flooding risk could be considered and resolved much quicker.
- National support from FRS national leads on HVP's and the equipment was welcomed although the added value they provided was difficult to assess.
- Excellent support by AA Sort who provided live pictures from risk areas so as resource prioritisation could be informed.

### **9. Mutual Aid**

- 9.1 Mutual aid was provided by other Local Authorities across Berkshire in the form of:
- Bracknell Forest Council – provision of a Tactical Advisor to support Civil Contingencies
  - Reading Borough Council – provision of Liaison Officers to the east of the District
  - Wokingham Borough Council – provision of equipment
- 9.2 This is all agreed in advance by the appropriate Chief Executives for the whole of Berkshire when they approve the annual Berkshire LA Emergency Planning Memorandum of Understanding.

#### **Key Points 25:**

- Having the MOU agreement in place in advance was advantageous in relation to the process and the repayments thereafter.
- Offers of support were being provided at an early stage from across the Berks LA's which were less impacted than West Berkshire.

### **10. Military Aid to the Civil Authority (MACA)**

- 10.1 The military were made available to the Council from the 8 Feb as a result of national concerns and as a result of the Council declaring a Major Incident. No formal request was made via the SCG instead initial direct contact was made from the military to the Civil Contingencies Manager.

- 10.2 On activation they provided a Liaison Officer into the EOC, the CO made direct contact with the Controller and soldiers were mustered across the area.
- 10.3 The military were based at:
- Brock Barracks, Reading
  - Denison Barracks, Hermitage
  - Newbury Weekly News Offices
  - WBC, Council Offices
- 10.4 They had their own command and control arrangements which were set up in the Council Offices for their planning and reporting to 145 Bde via teleconferences.
- 10.5 7 Rifles area of responsibility was to the east of the district and crossed into Reading BC and 4 rifles covering the west.
- 10.6 The areas of focus for the Military included:
- sandbag filling based at Chieveley Depot
  - laying of sandbags
  - welfare checks
  - checking sites in advance in order that if an evacuation was necessary they had an awareness of the locations.
- 10.7 There first tasking was issued on 8 Feb and was completed in 9<sup>th</sup> Feb which was in support of blocking a breach in the canal near Theale which was adding to the risk of an SSE site flooding.
- 10.8 Guidance on the processes and support from the Military is found in the document [JDP 02: Operations in the UK \(second edition\) - Publications - GOV.UK](#) prepared by the Ministry of Defence.

### **Key Points 26:**

- The normal activation process was not put in place i.e. request to SCG to MoD etc. Instead the military were offering their support.
- The military mustering was quick and effective with a large resource available in a short period of time.
- 2 units were supporting West Berkshire but their boundaries were not coterminous with Council areas crossing West Berkshire and Oxfordshire boundaries.
- It took a bit of time for the Civil and Military agencies to fully appreciate each others roles, responsibilities and operational understanding.
- Tasks were assigned to the military, however initially this process was a little uncoordinated:
  - the tasking process perhaps not as clear as they needed to be;
  - Council staff needed to be with the military since they were acting on our behalf;
  - the command chain at the start for the military tasks to be confirmed by their chain of command was long and time consuming;
  - at times there were masses of resources by way of personnel but no tasks they could do which would make a difference
- the joint working to find solutions was invaluable – in that other military assets and expertise could be used if needed
- there was a degree of training required as to how to lay sandbags to get the most effective flood defence put in place.
- the support they provided by way of sandbag filling and deployment would not have been possible otherwise
- the support allowed other more technical work to be carried out by contractors and staff.
- Some military staff in their efforts to be helpful were adding to the workload of the Council
- A military flight to gain imagery of the Thames Valley only focused on the Thames and the outcome was questionable as to its value.
- they were only available in the response phase and not the recovery phase.



## 11. Resources

The resources involved in this incident included staff and equipment.

### 11.1 Staff

In addition to the staff involved directly in the EOC there was a significant number of staff involved out on site. These staff included:

- Highways Officers who were involved in assessing the conditions and trying to come up with solutions/preventative means to reduce the risk of flooding.
- Housing Officers – assessing and supporting, including phoning or visiting vulnerable clients, many not on our database.
- Environmental Health Officers – assessing public health issues
- Rangers and Countryside staff – assessing public rights of way, putting in closures and maintaining them.

#### Key Points 27:

- The management of these staff on site is essential for their safety & welfare. Rotas, teams for specific areas, service coordination and links to the EOC are essential. More development is necessary in this area.

### 11.2 Contractors

Many of the Council's contractors worked to ensure critical services were provided including care home workers.

Volkers Highways operated at full capacity to support the response with staff, pumps, sandbags, road closures and signage being provided. They also were supporting the military doing the sand bag filling at the depot.

### 11.3 Equipment

**Sandbags:** Whilst the policy in relation to the provision of sandbags was in place and was being adhered to. This had to change due to the Prime Ministers comment on 11 Feb 14 "*My message to the country today is this. Money is no object in this relief effort, whatever money is needed for it will be spent. We will take whatever steps are necessary*". As a result in West Berkshire alone over 15,000 sandbags were delivered, in addition there was 46,000 made and supported West Berkshire (and others) as controlled by the Environment Agency.

The recovery of these sandbags, along with others provided by Parishes and individuals resulted in 15 tonnes of wet sandbags being recovered over a 39 days period with approximately 585 tonnes, which were moved to landfill.

**Signage:** 100 additional flood signs had to be procured.

**Pumps:** Whilst the Council had 3 of its own pumps more were required to support communities and individuals as set out below:

Pumps delivered to communities:

- 2 x 6 inch submersible pumps                      West Ilsley (1 x Selwoods, 1 x EA)
- 1 x 4 inch mechanical pump                      Bradfield (Selwoods)

- 1 x 4 inch petrol pump Lambourn (Winnersh plant)
- 1 x 8 inch mechanical pump Eastbury (Selwoods)
- 1 x 6 inch submersible pump Eastbury (Pump Supplies)
- 2 x 6 inch submersible pumps Great Shefford (Pump Supplies)
- 1 x 6 inch mechanical pump Great Shefford (WBC)
- 3 x 6 inch mechanical pump Pump Supplies) Great Shefford (1 x WBC, 1x Selwoods, 1x

Pumps delivered to houses:

- 1 x 2 inch submersible - Lambourn
- 2 x 2 inch submersible - West Ilsley
- 1 x VH pump - East Ilsley
- 2 x 4 inch pumps - Various locations

In addition to the above pumps, RBFRS secured and coordinated the High Volume Pumps to support the efforts in:

- Wellington Close, Newbury
- SSE site, Pingewood
- West Ilsley
- Stables, West Ilsley
- East Ilsley
- Compton

**Generators.** Due to power cuts generators were supplied to some premises in East Ilsley in order that they could keep their water pumps operating.

**Portaloos.** In locations where the sewage system was being inundated with water to such an extent that the communities could not use their private facilities, portaloos were provided. A total of 35 were provided at the following locations, some were in place for a few weeks others were in place for over 4 weeks.

- Purley on Thames
- Pingewood
- West Ilsley
- Eastbury
- East Garston
- Great Shefford
- Newbury (Shaw)

**Rest Centres.** 3 rest centres were available during the floods. Rest centres in Purley on Thames and Eastbury had equipment delivered and were ready to be staffed if needed. Another was available in the Phoenix Centre, Newbury. The only one used was the Phoenix Centre for 3 x evacuees from Lambourn Court. This was

utilised for one day and night before homes were found for the evacuated residents by the owner of the site.

### **Key Points 28:**

- Political comments made in the in the national media have an immediate impact on the demands on the local response.
- Different communities had very different demands of the Council as to the resources and support they expected.
- Property level flood defence information is not well known to individual property owners which results in many feeling that sandbags are the answer – they often are not.
- Sourcing some key resources such as pumps was difficult due to the demand nationally.
- The responsibility as to whether the Council or other agencies should provide all the resources e.g. portaloos.
- The forward thinking and support provided by way of generators and rest centres were positive.
- Support by RBFRS (and from across the UK) with High Volume Pumps was of great value in some areas.

## **12. Communications**

An essential part of any incident is to warn and inform the community as to the situation and what they can do to help to help themselves. In so doing the Council used a number of tools to do so including:

### **12.1 Website**

Visits to the WBC website were up an average of 50% during this period. Our flooding map received almost 20,000 views and was the most popular page on the site, surpassing even the Home Page, for three days in a row.

Whilst the usual peak time for website use is 11:00 or 12:00, on 7 and 8 of February it was 14:00 and on 9 February it was 22:00. Evening viewing figures were much higher than normal emphasising the need to keep content updated round the clock.

Search phrases included “west berkshire flooding”; “berkshire flood warnings” and “newbury flooding” meaning people were actively looking for information about flooding and coming to our website to find it.

### **12.2 Social Media**

There were 1,000 visits to our site from links in Facebook, Twitter also featured highly too as a “referring site”.

Whilst the EOC was operational the Communications team monitored and responded to social media at least 12 hours a day, longer on some days where needed.

### 12.3 Press Releases

In order to coordinate press release content TVP coordinated a daily Communications meeting.

During the period 7 January to 30 May 2014 there were 2 press releases provided and 28 press enquiries made relating to the flooding. The average press enquiry per month is just over 41.

The majority of these enquiries were from Newbury Weekly News (20 enquires , 71%), 3 enquiries came from Reading Chronicle, 2 from Heart Thames Valley and 1 enquiry each from BBC South Today, Reading Post and The Breeze.

### 12.4 You Tube

TVP were producing YOU Tube videos and posting them. These were coordinated from the West Berkshire TCG.

### 12.5 Community Communications

On almost a daily basis from 22 December 2013 until end March 2014 there was communications going out from the Civil Contingencies Manager to the following:

- Flood Wardens
- Town and Parish Council Clerks
- Ward Members
- Businesses

These were sent by email and included details of:

- Weather forecast
- EA update and river/groundwater conditions
- What was expected in next 24/48hrs
- What the Agencies were doing
- What the Council was doing
- What was recommended of the communities

Some communities had a community email group and were passing this on via that route, others were placing the details in shop windows or notice boards or on parish website to try to keep the communities up to date.

### 12.6 Members Updates

The Controller was tasked each shift to produce an update for members as an email.

### 12.7 Professional Partners

In addition to the TCG/SCG teleconferences a more detailed report was sent to professional partners to update them.

### 12.8 Staff Updates

Emails were provided periodically for all staff to receive updates. In addition there were updates provided to Emergency Planning Liaison Officers, Business Continuity Liaison Officers, HoS, Directors, Duty Emergency Managers, Duty

Highways Officers etc. These were then being passed onto schools, care providers and other contractors to ensure they were all being kept up to date.

## 12.9 External Media Coverage

During the event there was a reasonable degree of media coverage from local and national TV and Radio. These tended to follow some key events or when personalities visited the area. This included:

- Radio Berkshire visiting Purley on Thames
- Good Morning Britain – when Ed Miliband MP visited Purley on Thames
- South Today – visiting Newbury (Shaw) area when the river started to overtop in that area.
- Local & national news outlets when the Minister of Armed Forces visited 7 Rifles plugging a gap in the Kennet & Avon Canal near Pingewood.

### Key Points 29:

- The range of methods used to get messages out to the communities and individuals was comprehensive however much of this usage was one offs in terms of volume and was often reacting rather than being proactive.
- Whilst TV or Radio coverage can be welcome in order to get messages across to the public it is not often welcome by residents who are struggling to cope and concerned about blighting their property. It also often resulted in authorised media spokespersons for the Council being diverted from tasks to support their media visit.

## 13. Visits

13.1 In any major incident there is often the will by MP's, representatives of the Queen (Lord Lieutenant/Deputy LL) etc to visit the area to better understand the impact of the flooding. This is understood and welcomed by communities provided the motives are genuine concern for the area.

13.2 Civil Servants who are responsible for implementing government policy also visited the area. This was important to ensure that they are able to advise the Government about the impact and effectiveness of any particular policy.

### Key Points 30:

- Managing and supporting "VIP" visits is important and should be the responsibility of staff not dealing with frontline issues.
- Having a 'visits plan' template was useful in making sure that the visits were managed effectively.
- Local MP's positively engaged with the EOC to get updates and advise where they were going in order that they had the up to date information.

## 14. WBC Service Response

Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
<b>Environment Directorate</b>		
<b>Planning &amp; Countryside</b>		
Countryside - PROW	Receipt of ELMs and co-ordination of officer work: Co-ordination of volunteer surveyors: Posting of closure notices, site checks Some welfare work Check damage to PROW Arranging for repairs	Whole team
Building Control	Officers available to check on structural issues to buildings (and sink holes)	
<b>Culture &amp; Environmental Protection</b>		
Arts & Leisure	Activity Team West Berkshire (Adventure Dolphin) used boats to check on communities and move people around	
Libraries	Provided customers with information regarding changes in the mobile library service	
Trading Standards		Staff in EOC - 1
Env Health	Checking private water supplies Managing complaints about drainage and systems overflowing Checking for potential faecal contamination Checking impact on food businesses	Staff in EOC – Logistics/ Operations Bronze Liaison in community
Waste	Checking areas where waste collections could not be made. Coordinating collection points with flooding wardens and community representatives. Notifying community of waste collection status	staff in EOC - Operations staff in community (waste)

Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
	<p>Organising clear up of flood debris</p> <p>Providing advice on disposal of flood damaged waste</p>	
<b>Highways &amp; Transport</b>		
Highways Transport	<p>Arranged and procured school transport for flood victims who had been moved into temporary accommodation.</p> <p>Managed diversions and timetable changes for school, PRU and public transport, particularly in the areas of Purley, Shaw Road, East Ilsley and Hampstead Norreys.</p> <p>Liaised between operators, Civil Contingences and Traffic Management.</p> <p>Website updates (e.g. Traveline and social media feeds) and customer information notices.</p>	Carried out by 5 officers: 4 in Education Transport, 1 in Public Transport.
Highways Maintenance	<p>Response to ELMs/customer service requests</p> <p>EOC coordination</p> <p>Highway inspections</p> <p>Arranging repairs/remedial works on the highway with Volker Highways</p> <p>Post flood condition surveys</p> <p>DfT bid for flood funding</p> <p>Arranging post flood repairs</p> <p>Managing/processing 3 Party claims</p>	8 staff involved
Highways Projects	<p>Organised daily rota of engineers to undertake site visits and acted as liaison between engineers and EOC.</p> <p>Arranging emergency engineering works.</p> <p>Liaising with other FRMA's and emergency services.</p> <p>Responding to flooding issues and advising the EOC.</p>	5 staff involved



Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
	Site visits to monitor known flood sites and check infrastructure. Meeting with stakeholders and providing advice where required/possible. Deploying pumps. Recording flood incidents on site (scale & extent of flooding).	
Highways Traffic & Road Safety	Processing emergency road closures and notices. Arranging road closure signs with Volker's Checking water levels in Purley, checking the sandbag situation and ensuring the pumping station is working, Erecting barriers and road closed signs in Purley	
General	General liaison with other emergency services, residents, WBC staff and EOC. Supported flood bus	
<b>Resources Directorate</b>		
<b>Strategic Support</b>		
Service General	Support to the EOC Management of the Council's website Support to the Recovery Leading the OSMC review of event	~10 staff
Civil Contingencies Team	Coordinated the actions of the Council prior to major incident declaration Acted as tactical advisors (TACADS) Provided daily updates to flood wardens, parishes and ward members Visited sites to assess needs of community and support other staff Supported flood bus Liaised with other responding agencies. Supported the recovery acting as TACADS	2 staff

Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
Communications Team	<p>Supporting the joint multi-agency teleconferences</p> <p>Provision of press releases</p> <p>Providing responses to media enquires</p> <p>Preparation of materials to the flood info bus.</p>	2 staff
Safer Community Partnership	<p>All Neighbourhood Warden teams did daily status checks across various areas in primarily Pangbourne and Purley, Theale and Newbury.</p> <p>Assisted Flood Wardens in Pangbourne and Purley distributing sandbags, they helped one resident move her possessions.</p> <p>Delivered hundreds of the foam pads for sandbagging, swept water from a number of gardens and helped sandbag the surround of Lambourn Court. They also did this in many other places, including Cromwell Rd, Shaw Rd and Newport Rd.</p> <p>Visited residents known to them.</p> <p>Most time was spent re-assuring and updating residents on the situation and talking to sightseers from outside the affected areas.</p> <p>Reported issues and pictures back to EOC.</p> <p>Involved in recovery.</p> <p>Sent out safety messages on behalf of the police and RBFRS throughout the flooding period.</p>	<p>Newbury Neighbourhood Wardens: the whole of the Newbury warden team worked during the flooding, which included 6 staff members, (4 full time, 2 part time).</p> <p>West Berkshire Neighbourhood Wardens: during the response, all 5 of the team were involved.</p> <p>Teams were working extra hours and changing rotas to support the effort.</p>
<b>Finance</b>	<p>Facilitated the capturing of all costs associated with the flooding</p> <p>Co-ordinating the Bellwin claim</p> <p>Providing reports on expenditure</p>	Head of Finance, Finance Manager

Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
<b>Customer Services</b>	<p>Creation of ELM requests, general information and signposting.</p> <p>Close liaison with the EOC to inform of developing situations and emergency escalations.</p> <p>2 staff covered shifts in EOC</p> <p>Other staff volunteered but were stood down.</p> <p>Contact Centre open at weekend to deal with OOH calls.</p>	<p>2x Staff in EOC.</p> <p>4x staff in Contact centre over weekend of storms.</p>
<b>Legal</b>	<p>EOC Staffing.</p> <p>Support on certain topics.</p>	
<b>ICT</b>	<p>EOC staffing.</p> <p>Technical support.</p>	
<b>HR</b>	<p>Offered counselling to staff affected by Flooding.</p> <p>Attended recovery meetings.</p> <p>Collated and prepared the payment information sent to Payroll for payment. Supporting numerous hours work and queries with staff and Payroll.</p>	<p>5 x HR Staff from the Training team undertook shifts in the EOC.</p> <p>Others within HR volunteered but were either stood down or not required.</p> <p>Roles undertaken were; Information Loggist and Admin.</p>
<b>Public Health &amp; Wellbeing</b>	<p>Produced local Public Health messages, including tweets for comms to send out on mental health issues relating to flooding, sanitation issues, risks to health from flooding etc.</p> <p>Staff went out on the 'flood bus'.</p> <p>Dealt with a number of emails from individuals concerned about sewage and public health risks</p> <p>Supported recovery process.</p>	<p>All members of the PH and wellbeing team were involved in writing and localising PH information for residents.</p> <p>Staff – 1 member of staff went out on Sat for 10 hours and 2 staff spent 8 hours each during the week.</p> <p>Several hours spent responding to residents and press enquiries and liaising with other services such as environmental health in the council.</p>

Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
<b>Communities</b>		
<b>Adult Social Care</b>	<p>Welfare work.            Visited effected communities.            Support flood bus.            Liaising with external providers and agencies.            Reduce non essential work.            Check flooded areas for identified and non identified vulnerable groups.            RAISE support for EOC.            Rest centres stand by.            Rest centre opening.            Liaison with military in community.            Domiciliary Care Services – staff were diverted to usable roadways to ensure all service users received their planned visits, impact on the service was an increase in mileage and travelling time for staff.            Resource Centres – opened with business as usual approach.            Staffing levels were maintained by organising cover for those affected. Phoenix Centre utilised as a Rest Centre. Some staff from the phoenix centre assisted with setting up the designated area.            Care homes, mainly unaffected apart from Willows Edge that had to be sandbagged and placed on alert for possible evacuation. Staff levels maintained.            Shared Lives, business as usual. Staff able to carry on their normal work duties.</p>	
<b>Education</b>	<p>Supporting the schools, helping them with information, reviewing the situation and providing updates.            Visited several sites and was planning should the flooding have persisted.            Provided regular service updates and carefully monitoring the situation.</p>	<p>Estimate that around 100 hours was spent supporting schools during the February period. This doesn't take into account the pre-Xmas storms.</p>

Directorate/Service/Team	Actions directed at the incident	Incident Resourcing
Children Services	Undertook telephone checks and visits to families in the affected areas that had been identified as vulnerable	4 Staff in the EOC Staff doing phone checks
Care Commissioning, Housing & Safeguarding	Welfare work. Visited effected communities. Support flood bus. Liaising with eternal providers and agencies. Reduce non essential work. Check flooded areas for identified and non identified vulnerable groups. RAISE support for EOC. Rest centres stand by. Rest centre opening. Liaison with military in community. Telephone checks to vulnerable clients by the Care Placement Team. Contracts and Care Placement Team liaised with home care agencies.	

#### Key Points 31:

- Whilst the EOC was the focus of staff attention the roles of the services were wide ranging across the whole Council.

## 14. Business Continuity

Whenever there is a Major Incident then business continuity may be affected. The Council has plans in place corporately and at most service levels to ensure this is managed effectively.

Due to the nature of the event no Business Continuity incident was declared across the Council. However most services were impacted to some extent and therefore Staff not involved in the EOC prioritised the work they would do in order to ensure critical services continued.

#### Key Points 32:

- Whilst no Council wide BC Incident was declared all services by default entered into the process of prioritisation and ensuring all critical and essential services were continued.

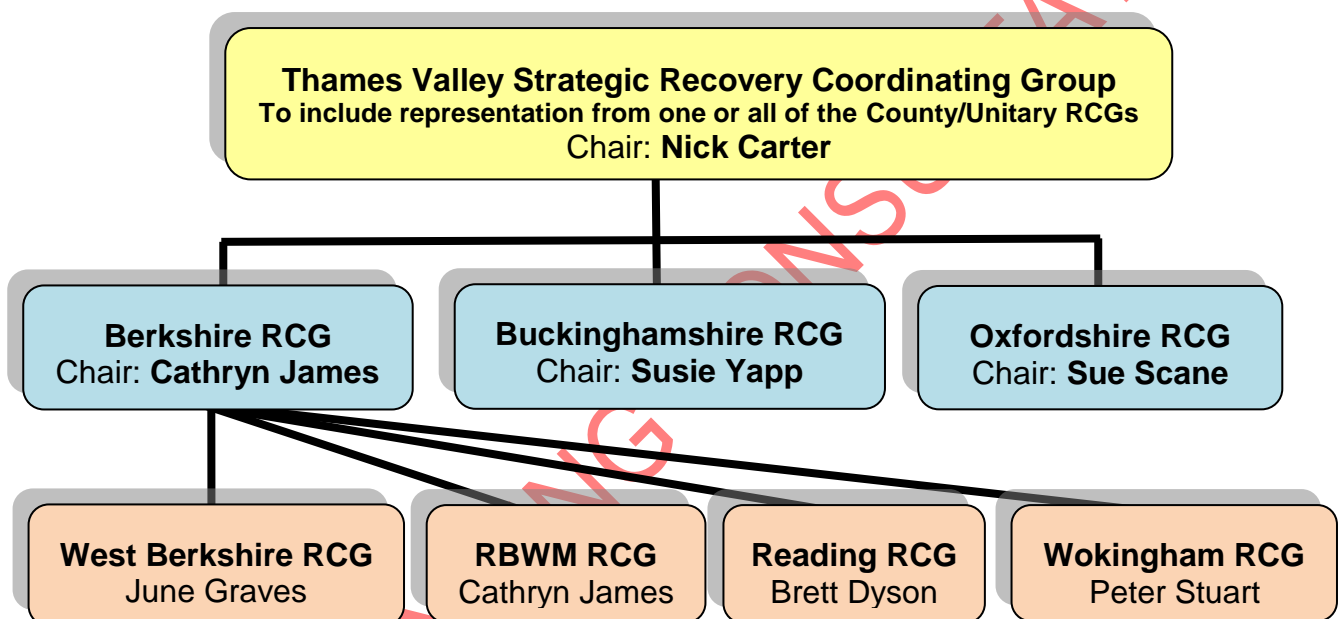
## 15. Recovery

When the Strategic Coordinating Centre (SCC) closed and the Recovery process took over the arrangements of coordination. The Strategic Lead for the Thames Valley was led by Chief Executive, Nick Carter from West Berkshire who could call on other strategic leads if necessary.

Below the Strategic level the Counties of Oxon, Bucks and Milton Keynes had their own Recovery Groups as did all the unitaries in Berkshire. The coordination of the recovery across Berkshire was lead by RBWM.

The Strategic Group was in place to coordinate recovery across the Thames Valley in order to try to ensure consistency across boundaries where possible. It was also a conduit for issues to be raised at Government Level.

The structure of the recovery across the Thames Valley is set out below:



Within West Berkshire a Head of Service was nominated as the lead for recovery.

A Recovery Coordinating Group (RCG) was put in place with a number of subgroups reporting into it including:

- Finance – focusing on recovery of costs, making bids for centralised funding and managing the grants to for property level protection and business support.
- Health & Well Being – focusing on public health issues such as gastroenteritis and the psychosocial elements of peoples well being,
- Infrastructure – focusing on the repairs necessary ranging from gulley cleaning, potholes, renewal of roads and public rights of way.
- Resources- focusing on the recovery of pumps, sandbags and other equipment
- HR- Staff Welfare/Support – focusing on staff welfare, staff payments and support.
- Communications- providing the communications for recovery

An action plan was developed and through weekly/monthly meetings the actions monitored and progressed.

Whilst most of the actions are closed in relation to recovery of sandbags, pumps etc some of the actions will remain open for some time such as Repair and Renewal Grants, monitoring of psychosocial effects and infrastructure repairs.

The recovery in West Berkshire was a phased process since some of the areas were flooded or at risk of flooding until late June.

### Key Points 33:

- The swift setting up of the recovery group and structure in West Berkshire meant that a plan and actions were put in place effectively.
- For each group a Tactical Advisor who knows the plan was put in place which was effective in supporting chairs navigate the processes.
- Some national guidance in relation to Public Health and Sandbags contradicted each other.
- Some rural communities noticeably worked together to support their Community and the Council in the recovery process. Whereas in the Newbury communities this was not the case.
- Supporting the Repair and Renew Grants process which takes approx 7.5hrs per application to administer.
- Expectations of communities as to speed of recovery of their local infrastructure was difficult to manage due to the scale.

## 16. Finances

- 16.1 A new cost code was put in place at an early stage to allow all costs to be captured. This has sufficient staff approved to raise and approve orders quickly.
- 16.2 The Civil Contingencies procurements cards were used effectively to purchase urgent supplies during the incident. The credit on each card was sufficient for this event.
- 16.3 Managing the costs by both the 'Agresso' system and the credit card was effective.
- 16.4 This prolonged period of response due to staff costs, contractor costs and resources such as pumps and sandbags etc cost over £1million. The majority of which is recoverable via the [Bellwin scheme 2013 to 2014:](#)

### Key Points 34:

- Procurement cards were necessary for the event
- Access to some petty cash would have been useful
- The government response by way of releasing funds was not too complex and were released quickly.
- The funding process of Repair and Renew Grants could have been simpler and could include some properties that nearly flooded but for the efforts of the communities and individuals which saved them. They now could now be perceived as being penalised.



# Section 5 - Consultations and Debriefs Analysis

## 1. Introduction

The consultation methodology used was a multimodal methodology in order to encourage a wide response rate and to capture as much learning as possible.

The full range is set out below

- (a) 5 Online Surveys (using the on-line Survey Monkey) to be completed by:
  - (i) Residents - on-line and hard copies sent to properties believed to be flooded.
  - (ii) Businesses on-line and hard copies sent to properties believed to be flooded.
  - (iii) Professional Partners – direct email to agencies involved in the response and recovery stages.
  - (iv) Flood wardens, Town & Parish Councils and Ward Members – direct email
  - (v) West Berkshire Council staff – direct email to all staff.
- (b) Consultation with Local Flood Forums (Lambourn Valley, Pang Valley and Streatley)
- (c) West Berkshire Council Emergency Planning Liaison Officer debrief meeting.
- (d) Engagement with other agency or organisation debriefs.

## 2 Results & Analysis

### 2.1 On Line Surveys

A series of questions were posed throughout to elicit comments on specific themes identified. Responses to these questions were accepted via an online questionnaire developed and hosted on "Survey Monkey" to allow for easy analysis and collation of data. These surveys were promoted via the media, the Council Website and via emails sent to flood wardens, Town and Parishes and Ward Members; professional partners etc. In addition where we believed properties had flooded hard copies of the questionnaire were sent directly to them. Where hard copies were received then the data was inputted into the online form by Council officers.

The consultations ran from 25 April to 6 June 2014 giving 6 full weeks for responses to be provided. Promotion to complete the survey was provided during this 6 week period.

The majority of the total response to all surveys (497) were received via the online route with 73 (14.6%) being received as hard copies in relation to the residents survey only.

WBC Staff	161
Professional Partners	40
Residents	229 (73 via hard copies)
Businesses	9
Flood Wardens, Town/Parish and Ward Members	58
<b>Total</b>	<b>497</b>

The following provides the feedback from these surveys.

**Professional Partners**

**WBC Staff Survey**

**EPLO & BCLO Debrief**

**Berkshire & Thames Valley Debriefs**

**Residents Survey**

**Business Survey**

**Flood Wardens, Town & Parish & Ward Members Survey**

**Feedback from Flood Forums**

**Feedback from OSMC**

**DRAFT PENDING CONSULTATION**

## Section 6 - Conclusions and Recommendations

**Note: Below is the initial draft recommendations gleaned from the initial review of the data. These will be developed and evidenced when all the reviews have been completed.**

Serial	Recommendation	Services
1.	Review and revises plans as necessary in light of the lessons identified including: <ul style="list-style-type: none"> <li>WBC Major Incident Plan</li> <li>WBC Operational Manual</li> <li>WBC Adverse Weather Plan</li> </ul>	Strategic Support, Civil Contingencies Team
2.	Review WBC Adverse Weather Plan, flood Annex to include: <ul style="list-style-type: none"> <li>consideration of strategic temporary flood defences or actions to alleviate flooding in specific areas</li> <li>revision of the Groundwater plan</li> </ul>	Strategic Support, Civil Contingencies Team Highways & Transport Other agencies – EA, TW & RBFRS
3.	Develop action cards/Tactical Plans for all plans which give a quick start for anyone involved.	Strategic Support, Civil Contingencies Team
4.	Review the response to a wide area, prolonged event to include: <ul style="list-style-type: none"> <li>LALO's</li> <li>Communications</li> <li>Coordination of service resources</li> <li>Staff Welfare and management</li> </ul>	Strategic Support, Civil Contingencies Team/Communications Team
5.	Review resources in relation to flooding including: <ul style="list-style-type: none"> <li>Pumps</li> <li>Sandbags – Policy</li> <li>Portaloos</li> <li>Responsibilities for provision of resources</li> </ul>	Strategic Support, Civil Contingencies Team Highways & Transport
6.	Develop with the utilities and other partners a data sharing protocol, particularly in relation to vulnerable clients and locations of assets.	Strategic Support, Civil Contingencies Team via the TV LRF
7.	Recommend that all utilities review their practices in relation to: <ul style="list-style-type: none"> <li>Sharing information</li> <li>Improving communications with professional partners and customers</li> <li>Review their staffing in relation to support to the various command and control structures</li> </ul>	
8.	Review the internal Business Continuity arrangements at corporate and service level and the integration during Major Incidents	ICT & Strategic Support, Civil Contingencies Team

<b>Serial</b>	<b>Recommendation</b>	<b>Services</b>
9.	Review the communications procedures – internally and externally to include: <ul style="list-style-type: none"> <li>• website (data on the system, updating with road closures etc etc),</li> <li>• communications methods to communities etc</li> </ul>	Strategic Support, Civil Contingencies Team Strategic Support, Communications Team
10.	Engage with the TV LRF in relation to the location and resources needed for a TCG in order to develop local plans with the resources	Strategic Support, Civil Contingencies Team
11.	Recommend to the TV LRF that the TV LRF Vulnerable People Plan is reviewed and revised to include more details in relation to data sharing and joint working to support the vulnerable in the communities.	Strategic Support, Civil Contingencies Team
12.	Recommend to the TV LRF that the command and control arrangements are reviewed in relation to: <ul style="list-style-type: none"> <li>• TV LRF Teleconferences</li> <li>• Information sharing</li> <li>• Sandbag/resource Cell</li> </ul>	
13.	Recommend that the Command and Control arrangements of the Environment Agency is reviewed to include: <ul style="list-style-type: none"> <li>• The management of their incident room</li> <li>• Management of their EA led teleconferences</li> <li>• Review their staffing in relation to support to the various command and control structures</li> <li>• Review of the procedures for urgent requests for discharging into main rivers or other actions on these rivers</li> </ul>	Environment Agency
14.	Recommendation that there are agreed government level guidance in relation to: <ul style="list-style-type: none"> <li>• PH advice and flood water</li> <li>• Disposal methods for sandbags</li> </ul>	
15.	The Government/MoD review the procedures for activation, roles and responsibilities/potential taskings and charging etc for military engagement	
16.	Review the Information Management System in the EOC	Strategic Support, Civil Contingencies Team
17.	Revise the training programme including elearning, to increase the number of trained officers and consider the basic training as mandatory. Training to include: <ul style="list-style-type: none"> <li>• specific training for controllers and deputies.</li> <li>• Multi-agency working</li> <li>• Loggists</li> </ul>	Strategic Support, Civil Contingencies Team

Serial	Recommendation	Services
18.	Work with communities to develop more Community Emergency Plans including: <ul style="list-style-type: none"> <li>• Increasing community emergency volunteers</li> <li>• Resources</li> <li>• Understanding</li> </ul>	Strategic Support, Civil Contingencies Team/Partnerships Team
19.	Promote locally and recommend promotion nationally in relation to the responsibilities of property owners in relation to preparing themselves for flooding or any other emergency.	Strategic Support, Civil Contingencies Team/Communications Team

DRAFT PENDING CONSULTATION

## Glossary

ACC	Assistant Chief Constable
AA SORT	Automobile Association XXXX
BC	Business Continuity
BCLO	Business Continuity Liaison Officer
CMT	Crisis Management Team
CO	Commanding Officer
COBR	Cabinet Office Briefing Room
CRIP	Commonly Recognised Information Picture
DCLG	Dept of Communities and Local Government
DEFRA	Dept of Food and Rural Affairs
DfT	Dept of Transport
EOC	Emergency Operations Centre
EPLO	Emergency Planning Liaison Officer
EA	Environment Agency
ELM	Electronic Logging Manager
FRS	Fire & Rescue Service
FWMA	Flood Water Management Act 2010
HoS	Head of Service
LA	Local Authority
LALO	Local Authority Liaison Officer
MACA	Military Aid to the Civil Authority
MIP	Major Incident Plan
NRA	National Risk Assessment
OSMC	Overview & Scrutiny Management Commission
PROW	Public Rights of Way
PRU	Pupil Referral Unit
RSL	Registered Social Landlord
RBWM	Royal Borough Windsor & Maidenhead
RCG	Recovery Coordinating Group
RBFRS	Royal Berkshire Fire & Rescue Service
RED	Resilience and Emergency Division (DCLG)
RAISE	Referral and Assessment In a Social care Environment
TW	Thames Water
SEPD	Southern Electric Power Distribution
SFRA	Strategic Flood Risk Assessment
SSE	Scottish & Southern Electricity
SCG	Strategic Coordinating Group
SCC	Strategic Coordinating Centre
TCG	Tactical Coordinating Group
TVP	Thames Valley Police
TV LRF	Thames Valley Local Resilience Forum
TV LRF MAP	Thames Valley Local Resilience Forum Multi-Agency Protocols
TACADS	Tactical Advisor
WBC	West Berkshire Council