

<b>Name of Organisation</b>	Environment Agency
<b>Completed by</b>	Kate Vincent
<b>What effect did the adverse weather have on your organisation?</b>	<p>Responsibility for flooding issues is managed by the flood risk authorities: these include Lead Local Flood Authorities, Thames Water and us. The Flood and Water Management Act (FWMA) 2010 gives responsibilities for planning for and managing any <i>local</i> flood risk issues, including surface and groundwater flooding problems, to Lead Local Flood Authorities (LLFAs). The highway authority, county councils or unitary authorities are also responsible for drainage systems associated with the highways. Thames Water is responsible for the sewer system. We, the Environment Agency, have responsibilities relating to flooding from main rivers and the sea.</p> <p>Our responsibilities include forecasting and mapping flood risks, providing flood warnings for river and coastal flooding, building and keeping defences in good working order and taking part in emergency planning and response. We manage central government grants for capital projects carried out by all risk management authorities.</p> <p>Our West Thames Area office is based in Wallingford, Oxfordshire. We cover a large geographical area taking in the Thames from its source in Gloucestershire down to Teddington where the Thames turns tidal and many of the tributaries that drain into it through parts of Gloucestershire, Wiltshire, Buckinghamshire and the whole of Oxfordshire, Berkshire and Surrey.</p> <p>In West Thames, the flooding started in December and continued into January and February. Some areas received two and a half times the rainfall they would normally expect between December and February. In just 12 days before Christmas, some locations received 150mm of rain. This compares with a monthly average of 75mm.</p> <p>There were several dry days between Christmas and New Year that allowed river levels across the area to subside. However, the period around New Year and the first week of 2014 was once more, exceptionally wet. Rainfall totals averaged 90mm however, some areas received up to 150mm of rain again.</p>

At the end of January, river levels were falling slowly. However, further rain prevented levels from returning to what would be considered normal for the time of year. Heavy and sustained rainfall at the end of January and in the first week of February caused rivers to rise once again.

<b>County</b>	<b>Winter 2013/14 rainfall (mm)</b>	<b>Winter long term average rainfall (mm)</b>	<b>Winter 2013/14 rainfall compared with winter average</b>
Berkshire	415	190	220%

We issued 157 flood warnings during the winter floods: 22 in December, 63 in January and 72 in February. On 9 February we issued 14 severe flood warnings on the Lower Thames following forecasts that levels could approach those last seen in 1947. We issued severe flood warnings because there had been significant risk to life and a threat to the local infrastructure.

Over the winter period, we issued 19 flood warnings for main river flooding and 2 groundwater flood alerts for West Berkshire.

We opened our Area Incident Room on 23 December. In total, it was in operation for 46 days. For the majority of the incident it was manned 24 hours a day, and over the 46 days involved over 600 staff. It finally closed on 28 February.

From the onset of the heavy rain just before Christmas and throughout the prolonged flooding, we kept our Local Resilience Forum (LRF) partners informed of river response to rainfall and areas that would flood. As the incident developed, our Operations teams worked alongside our LRF partners and members of the Armed Forces to build temporary flood defences, clear trash screens and pump out floodwater. Our Waterways staff maintained the River Thames (its lock sites and control assets) as trees and debris were washed downstream.

We operated the Jubilee River throughout the incident as part of the Maidenhead, Windsor and Eton

	<p>flood alleviation scheme that protected around 1,000 properties. Other smaller schemes, such as those at Newbury and Haydon Wick in Swindon, were in action for the very first time.</p> <p>Overall, more than 1,400 properties in West Thames suffered internal flooding by main river and a further 300 were flooded by groundwater. Our assets protected over 1750 properties.</p>
<p><b>What plans did your organisation have in place beforehand to help manage the impact of the severe weather?</b></p>	<p>We are a Category 1 responder along with the emergency services, local councils and NHS bodies. These responders<sup>1</sup> are organisations at the core of the response to most emergencies.</p> <p>On 20 December, we first informed our Thames Valley LRF and Surrey LRF partners of the potential for flooding the following week.</p> <p>We either chaired Flood Advisory Service (FAS) teleconferences or sent advisory emails to both the Surrey and the Thames Valley LRFs. This daily activity took place between: 20 December and 1 January; 2 January and 8 January; and 3 February and 28 February.</p> <p>Our FAS communications were arranged to make sure our partners received early warning of where and when locations were likely to flood/continue to flood.</p> <p>As the flooding became more severe and the potential effects on property and infrastructure flooding were identified, our FAS teleconferences were replaced by ones coordinated by the Thames Valley and Surrey LRFs. These tactical and strategic teleconferences were called and chaired by the police. The Strategic Coordination Groups (SCG) discussed and agreed the responses of each organisation whilst the Tactical Coordination Groups (TCG) took the lead for the response.</p> <p>We attended the SCG and TCG meetings that were held by TVLRF and Surrey LRF partners including the TCG that West Berkshire set up during February 2014.</p>
<p><b>Of the actions that you had planned, what</b></p>	

<p><b>worked well?</b></p>	<ul style="list-style-type: none"> <li>• Providing daily flooding forecasts on what would flood and when, extent and duration of flooding to all responding agencies throughout the prolonged event and contributing to a multi agency response via SCGs and TCGs.</li> <li>• Issued flood warnings to over 3000 properties affected by the flooding in Dec, Jan and Feb.</li> <li>• Keeping communities up to date on their local river flooding forecasts/outlook by providing detailed information on our website and Floodline service, at least once daily</li> <li>• Sending our ambassadors to communities that were going to flood or during the flooding to offer information and practical advice.</li> <li>• The flood alleviation work in Newbury.</li> </ul>
<p><b>What worked less well or would you change for future events and why?</b></p>	<p>After the flood eventually subsided at the end of February 2014, we held internal de-briefs to review our own performance. From this we have identified actions to improve our response, these will feed into a high level National Lessons Learnt Report that we expect to publish at the end of September. This is because the winter floods 2013/14 was on such a widespread scale affecting many different parts of the country, we want to make sure that all the improvements we make to our response and services are consistent across England.</p> <p>We also attended the de-briefs arranged by TVLRF and Surrey LRFs. The Thames Valley LRF held its multi-agency debriefing session on 10 April 2014.</p> <p>The Thames Valley LRF debriefing report and action plan is due to be published soon. The actions vary from multi agency actions to others placed on individual agencies.</p> <p>We also attended other more localised de-briefs including the de-brief held by the Berks Resilience Group which was chaired by West Berks Emergency Planning Officer in July.</p> <p>The Berkshire report with issues and suggested actions has been produced and many of the actions were either the same or very similar to ones identified in the TVLRF plan so these will be included in the TVLRF action plan.</p>

<b>What changes, if any, were made to your plan in response to events and what effect did they have?</b>	We didn't make changes to our planned response as such it was more a case of working with our LRF partners to provide an increased response as the scale of the flooding grew in magnitude through the Thames Valley and Surrey counties.
<b>Please outline any other comments that you may have for the Commission.</b>	