Board Meeting
Floods briefing
6 February 2014
December 2013 to January 2014

- Southern England experienced wettest January on record
- Many areas received 200% of average rainfall
- Following wettest December in Southern England for 50 years
- Lowest depression recorded in UK since 1886
Flood Guidance Statement
day by day

Early December 2013
to February 2014
Our response

- 131 severe flood warnings issued
- 28 incident rooms open
- National Incident Room open 47 consecutive days
- 4,400 Environment Agency staff involved
Over Christmas and into the new year our staff have been working around the clock to protect communities from the effects of flooding. Here is some of the work we have been doing.

- Clearing trash screens so culverts don’t get blocked
- Running incident rooms so we can warn and inform people
- Removing debris from rivers to keep them flowing
- Deploying temporary defences to protect homes and businesses
- Closing flood barriers to protect communities
- Repairing nature’s natural defences after storm damage
Summary of properties flooded and protected since early December

<table>
<thead>
<tr>
<th>Event</th>
<th>No. of properties flooded</th>
<th>Approx. no. of properties protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late January / February floods (06/02/2014 10.15)</td>
<td>371</td>
<td>160,000</td>
</tr>
<tr>
<td>New Year floods (01/01/2014 - 20/01/2014 13.30)</td>
<td>718</td>
<td>240,000</td>
</tr>
<tr>
<td>Christmas floods (23/12/2013 - 31/12/2013)</td>
<td>1,400</td>
<td>80,000</td>
</tr>
<tr>
<td>Early December coastal surge</td>
<td>2,600</td>
<td>800,000</td>
</tr>
</tbody>
</table>
Properties protected

Approximate numbers of properties protected during December and January floods (Environment Agency figures)

Approximately:
- 800,000 properties protected (early December coastal surge)
- 80,000 properties protected (late December)
- 240,000 properties (early January)
- 110,000 properties (late January-February)

Map compiled 5 February 2014 16h30

© Crown Copyright. All rights reserved. Environment Agency, 100026380, 2014.
Repair of damaged defences

Defences and structures which were damaged during the December and January storms and where known, will be repaired before and after the February spring tides

Map Compiled: 13 January 2014 15h30

- Defences damaged during early December coastal surge which will be repaired before February spring tides
- Defences damaged during early December coastal surge which will be repaired after February spring tides
- Defences damaged over Christmas and New Year

© Crown Copyright. All rights reserved.
Somerset Levels – Current situation

- More than 65 million cubic metres of floodwater covering 65km²
- Rainfall in Somerset likely to exceed 300% of LTA by end of weekend
- 89 properties flooded
- 217 properties cut off – some since 2 Jan 2014
- Muchelney has previously flooded for up to 3 weeks during significant floods
- In 2012 it flooded twice – for 17 days from 22 Nov to 9 Dec and then again from 24 Dec 2012 to 5 Jan 2013
- Over 200km² land protected
- 3,500 properties protected across Somerset
- Moving resources from North to South
Response

- 29 permanent pumps
- Additional 24 temporary pumps
- Pumping 34 cumecs (34 tonnes of water per second or 2.9 million tonnes a day)
- Total pumping capacity 43 cumecs
- Equivalent to emptying an Olympic-sized swimming pool every 90 seconds
- Pumping at higher rate than 2000 and 2012 flood events

Picture: The Guardian, Ben Stansall/AFP/Getty Images
### Somerset Levels and Moors

**Overview map showing minimum number of days to pump clear (assuming no further rainfall)**

*Data from 5 February 2014*

<table>
<thead>
<tr>
<th>Name</th>
<th>Days to pump clear</th>
<th>Current Drain Level (mAOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northmoor</td>
<td>11</td>
<td>5.1</td>
</tr>
<tr>
<td>Saltmoor</td>
<td>8</td>
<td>5.2</td>
</tr>
<tr>
<td>Currymoor</td>
<td>26</td>
<td>7.9</td>
</tr>
<tr>
<td>West Sedgemoor</td>
<td>22</td>
<td>6.0</td>
</tr>
<tr>
<td>Midelney</td>
<td>18</td>
<td>8.3</td>
</tr>
<tr>
<td>Long Load</td>
<td>11</td>
<td>9.5</td>
</tr>
<tr>
<td>Huish Episcopi</td>
<td>16</td>
<td>8.3</td>
</tr>
<tr>
<td>Westover</td>
<td>13</td>
<td>8.0</td>
</tr>
<tr>
<td>Westonzoyland</td>
<td>6</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Six week action plan

- Somerset County Council co-ordinating local input
- Action plan work-streams – river management (led by us), land management, infrastructure, community and business resilience, and economics
- We are leading on dredging work
- Dan Rogerson chaired first strategic meeting on 4 February
- Draft plan approved by 7 March
<table>
<thead>
<tr>
<th>Region</th>
<th>Wednesday to Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglian</td>
<td>49</td>
</tr>
<tr>
<td>Midlands</td>
<td>88</td>
</tr>
<tr>
<td>Yorkshire and North East</td>
<td>69</td>
</tr>
<tr>
<td>North West</td>
<td>81</td>
</tr>
<tr>
<td>South East</td>
<td>75</td>
</tr>
<tr>
<td>South West</td>
<td>97</td>
</tr>
</tbody>
</table>

Forecast rainfall – max (mm)
Wave Model - Global Sea Height

Mouse-over/click Control Panel buttons (below left) to stop or reverse animation
Frequently Asked Questions (FAQs)

Forecast global sea height

Initialized: 00Z Mon 3 Feb 14
+54hr Forecast
Forecast Date: 06Z Wed 5 Feb 14

5 February 2014
Groundwater alert areas
Map showing all groundwater alert areas, and where alerts have been issued for current floods.
Map Compiled: 5 February 2014 16h30

© Crown Copyright. All rights reserved.
Groundwater flooding, Hambledon, Hampshire

February 2014

Source: www.chrisdixonphotography.com
Summary

- A period of extreme storminess: a succession of high tides combined with storm surges, coupled with record rainfall
- Most exceptional period of rainfall in at least 248 years
- 5,000 properties flooded, 1.3m protected
- Asset damage and repairs
- Significant focus on Somerset Levels and Moors
- Currently no end in sight (2 SFW, 54 FW) with another ‘conveyer belt’ of rainstorms and gales approaching – more properties will flood
- Focus on warning and informing, operational response