# Weekly rainfall and river flow summary



## Weekly bulletin: Wednesday 07 to Tuesday 13 January 2015

### **Summary**

It has been a very wet week across most of England, with the highest rainfall totals affecting the north-west and south of England. As a result river flows have increased at the majority of our indicator sites and latest daily mean flows are **normal** or higher for the time of year at nearly all our indicator sites, with over a third of our indicator sites **notably high** or **exceptionally high** for the time of year.

- Rainfall totals for the past week range from 18 mm in central England to 56 mm in the north-west (Table 1 and Figure 1).
- At nearly half way through the month cumulative rainfall totals for January to date range from 44% of the January long term average (LTA) in north-east England to 74% in the south-east (Table 1).
- River flows increased at the majority of our indicator sites compared to the previous week. The latest daily mean river flows are **normal** or higher for the time of year at nearly all of our indicator sites, with 3 sites now **exceptionally high** for the time of year (Figure 2).

#### **Outlook**

Any lingering rain will clear the south-east on Thursday morning with scattered showers following later in the day, the heaviest and most persistent of these will be in the west and over higher ground. These showers will be wintery in some central areas on Thursday and then confined mainly to higher ground in the north on Friday. The weekend and the start of next week are expected to remain unsettled with further showers at times, again heaviest and most likely in the north and west of England, although some chance of wintery showers in the north-east on Sunday.

Author: E&B Hydrology Team

| Geographic regions | Latest<br>Week:<br>07 - 13<br>Jan '15 | Latest month to<br>date:<br>Jan '15 |       | Last month:<br>Dec '14 |       | Last 3 months:<br>Oct '14 - Dec '14 |       | Last 6 months:<br>Jul '14 - Dec '14 |       | Last 12 months:<br>Jan '14 - Dec '14 |       |
|--------------------|---------------------------------------|-------------------------------------|-------|------------------------|-------|-------------------------------------|-------|-------------------------------------|-------|--------------------------------------|-------|
|                    | Total (mm)                            | Total<br>(mm)                       | % LTA | Total<br>(mm)          | % LTA | Total<br>(mm)                       | % LTA | Total<br>(mm)                       | % LTA | Total<br>(mm)                        | % LTA |
| north-west         | 56                                    | 81                                  | 72    | 150                    | 125   | 425                                 | 117   | 658                                 | 100   | 1301                                 | 112   |
| north-east         | 25                                    | 35                                  | 44    | 75                     | 93    | 260                                 | 111   | 446                                 | 101   | 936                                  | 114   |
| central            | 18                                    | 31                                  | 47    | 63                     | 88    | 236                                 | 120   | 392                                 | 105   | 881                                  | 123   |
| east               | 20                                    | 29                                  | 57    | 50                     | 91    | 210                                 | 128   | 379                                 | 119   | 736                                  | 123   |
| south-east         | 37                                    | 53                                  | 74    | 54                     | 71    | 289                                 | 132   | 447                                 | 115   | 990                                  | 136   |
| south-west         | 50                                    | 76                                  | 66    | 75                     | 64    | 354                                 | 111   | 536                                 | 100   | 1263                                 | 125   |
| England            | 33                                    | 48                                  | 61    | 73                     | 87    | 285                                 | 119   | 462                                 | 106   | 989                                  | 122   |

Table 1: Latest rainfall summary information (Source: Met Office © Crown Copyright)<sup>1</sup>

• LTA = long term average rainfall for 1961 – 1990

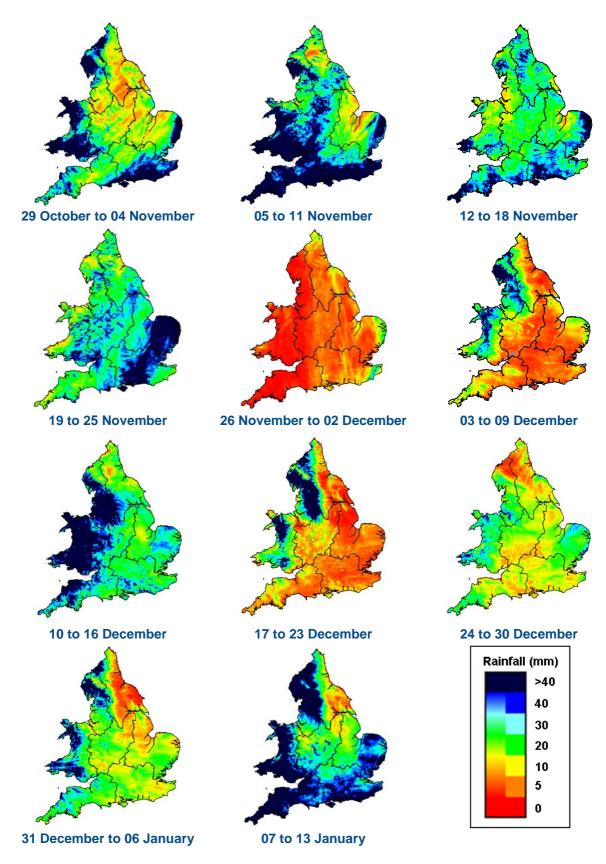
All data are provisional and may be subject to revision. The views expressed in this document are not necessarily those of the Environment Agency. Its officers, servants or agents accept no liability for any loss or damage arising from the interpretation or use of the information, or reliance upon views contained herein.

<sup>&</sup>lt;sup>1</sup> Notes

<sup>•</sup> Data for the current month are calculated using MORECS (Met Office Rainfall and Evaporation Calculation System); data for past months are provisional values from the National Climate Information Centre (NCIC).

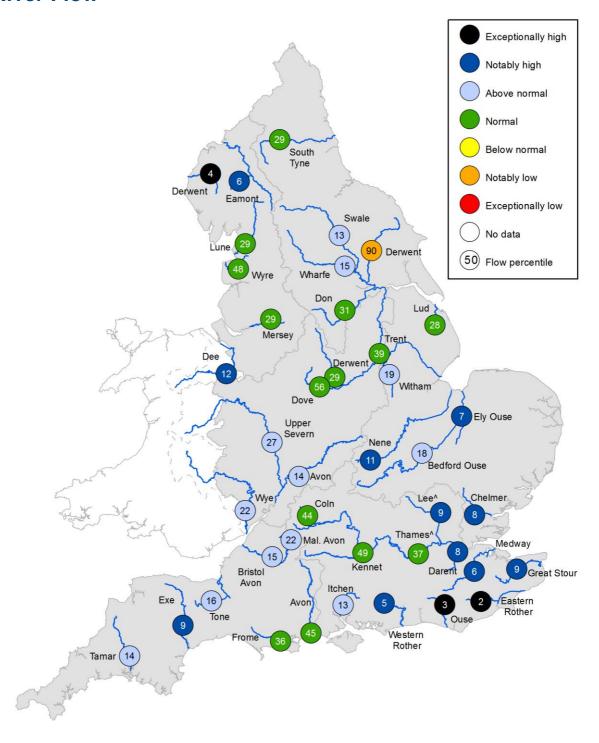
<sup>•</sup> The data is rounded to the nearest millimetre or percent (except when values are less than 1).

<sup>•</sup> Recorded amounts of rainfall are likely to be underestimated during snow events.



**Figure 1**: Weekly precipitation across England and Wales for the past 11 weeks. UKPP radar data (Source: Met Office © Crown Copyright, 2015). Note: Radar beam blockages may give anomalous totals in some areas. Crown copyright. All rights reserved. Environment Agency, 100026380, 2015.

#### **River Flow**



<sup>^ – &#</sup>x27;Naturalised' flows are provided for the Thames at Kingston and the Lee at Feildes Weir.

**Figure 2**: Latest daily mean river flow expressed as a percentile<sup>2</sup> and classed relative to an analysis of historic daily mean flows for the same time of year (Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100026380, 2015.

<sup>&</sup>lt;sup>2</sup> Flow percentiles describe the percentage of time that a particular flow has been equalled or exceeded compared to the historic flow record for that site for the time of year. For example, a flow percentile of 5 indicates that the current flow has only been equalled or exceeded approximately 5% of the time within the historic record for that time of year – i.e. a very high flow. A flow percentile of 95 indicates that the current flow has been equalled or exceeded approximately 95% of the time – i.e. a low flow. Flow percentiles presented relate to an analysis for the time of year and not a whole year.