

# Monthly water situation report: England

# 1 Summary - September 2024

It has been a very wet month across England with most catchments receiving above average rainfall during September. Soil moisture deficits (SMD) have decreased across England, with soils in many parts of the country ending September considerably wetter. River flows increased at all but 4 of our indicator sites in September and were classed as normal or higher at all sites. Groundwater levels decreased at nearly three-quarters of the sites we report on and levels at more than half of sites remain classed as notably or exceptionally high for the time of year. Reservoir storage decreased at more than three-quarters of the reservoirs we report on and the majority of reservoirs were classed as normal or higher. Reservoir stocks across England were 76% full at the end of September.

## 1.1 Rainfall

The rainfall total for England for September was 133mm which represents 189% of the 1961 to 1990 long term average (LTA) for the month (195% of the 1991 to 2020 LTA). Most hydrological areas received above average rainfall during September with only nine catchments receiving below average rainfall. The wettest hydrological area relative to the LTA was the Cotswold East catchment in south-east England which received 394% of LTA rainfall. The driest hydrological areas was the Derwent catchment in north-west England which received 61% of LTA rainfall in September. (Figure 2.1)

September rainfall totals were classed as normal or higher for the time of year in all but one catchment in England. Seventy-eight catchments (56%) were classed as exceptionally high for the time of year. Thirty-one hydrological areas recorded the wettest September since 1871. Additionally it was also the wettest September for central England since 1871. At the regional scale, September rainfall totals were a mixed picture. In south-east and central England rainfall was classed as exceptionally high whereas in north-west England rainfall was classed as normal. Rainfall in south-west and east England was classed as notably high and the north-east was above normal. For England as a whole rainfall was classed as exceptionally high. (Figure 2.2)

The 3-month cumulative totals were classed as normal or higher in all catchments with more than two-thirds of the catchments classed as above normal or higher. Three hydrological areas in south-east England, Cotswolds East, Cotswold West and Thame, all recorded their wettest 3 months (July-September) since 1871. The 6 month cumulative totals show a similar picture with rainfall classed as normal or higher in all catchments with all but sixteen catchments classed as above normal or higher. The 12 month cumulative totals were exceptionally high in all but four catchments and it has been the wettest 12 months (October–September) since 1871 for 67 catchments. It has also been the wettest 12 month

period ending in September for central and south-west England. Furthermore, England as a whole recorded the wettest 12 month period ending in September since 1871. (Figure 2.3)

#### 1.2 Soil moisture deficit

Due to above average rainfall soil moisture deficits (SMD) decreased significantly across most of England particularly across central, eastern and southern England. (Figure 3.1)

At a regional scale, soils across all areas of England remain wetter than average for the time of year. Across all regions of England soil moisture deficits had decreased sharply by the end of September and soils in north-west, south-west and central England had close to no SMD. (Figure 3.2)

## 1.3 River flows

Monthly mean river flows increased at all but four indicator sites in September. September monthly mean flows remain classed as normal or higher at all sites. Nineteen sites (35% of the total) were classed as exceptionally high for the time of year. Fourteen sites (25% of the total) were classed as normal for the time of year and 13 sites (24%) were classed as above normal. Nine sites (16%) were notably high. Seven sites recorded their highest monthly mean flow for September on record (record start given in brackets) in the:

- north-west, the River Weaver (since 1977)
- east England, the Bedford Ouse (since 1972) and the Nene (since 1970)
- south-east, the River Itchin (since 1958), the River Ouse (since 1979) and the River Ver (since 1956)
- south-west, the Upper Avon (since 1965) (Figure 4.1)

Monthly mean flows for September increased at all but one of the regional index sites. Flows at Caton on the River Lune in north-west England decreased however they remain classed in the normal range. Flows in The River Exe in south-west England were also classed as normal. Naturalised flows at Kingston on the River Thames and flows at Orford on the Bedford Ouse in east England increased and were classed as exceptionally high for the time of year. The River Dove in central England and the South Tyne in the north-east both recorded above normal monthly mean flows. The Great Stour in south-east England recorded notably high flows for September. (Figure 4.2)

## 1.4 Groundwater levels

At the end of September, nearly three-quarters of the groundwater indicator sites we report on recorded a decrease in levels. Levels at all indicator sites were normal or above for the time of year with more than a third of groundwater levels classed as exceptionally high. Seven sites were classed as normal at the end of September. Four sites recorded their highest end of September groundwater level on record including:

- Weir Farm (since 1983) in Bridgnorth Sandstone in central England
- Coxmoor (since 1990) in Idle Torne Sandstone in central England
- Priors Heyes (since 1972) in West Cheshire Sandstone in the north-west
- Skirwith (since 1978) in Carlisle Basin Sandstone in the north-west (Figure 5.1)

Groundwater levels decreased at all aquifer index sites in September with the exception of Jackaments Bottom (Burford Jurassic Limestone) in the south-east where levels increased to be classed exceptionally high. Levels at Weir Farm (Bridgnorth Sandstone), Skirwith (Carlisle Basin Sandstone) and Stonor Park (South West Chilterns Chalk) remain classed as exceptionally high for the time of year. Levels at Little Bucket (East Kent Stour Chalk) and Redlands Hall (Cam and Ely Ouse Chalk) were notably high and above normal respectively. Chilgrove (Chichester Chalk) and Dalton Estate (Hull and East Riding Chalk) were classed as normal for the end of September. (Figure 5.2)

## 1.5 Reservoir storage

Reservoir storage decreased during September at over three-quarters of the reservoirs and reservoir groups we report on. The largest stock decrease was at Farmoor in south-east England which decreased by 10%. Most reservoirs and reservoir groups we report on at the end of September were classed as normal or higher for the time of year. Four reservoirs were classed as below normal and one, the Pennines Group in north-west England, was classed as notably low. The Dee system continues to be impacted by ongoing reservoir maintenance and was classed as below normal. (Figure 6.1)

At a regional scale, total reservoir storage decreased in all regions. In south-west England, overall storage decreased by 5% during September. For England as whole, storage decreased to 76% at the end of September. (Figure 6.2)

#### 1.6 Forward look

October had an unsettled start, with wet conditions in many places, particularly the south-west of England. Through the middle of October, conditions are expected to settle with longer, drier spells in the south and east and the greatest chance of rain in the north. Some wet and windy

conditions may set in to the north-west towards the end of the month, but more settled conditions are likely as high pressure becomes dominant. This could bring frost and fog at night, as the difference between daytime and overnight temperatures becomes large.

For the 3 month period for the UK from October to December, precipitation is expected to be near average, with normal chance of either dry or wet conditions. There is a greater than normal chance of conditions being mild, however cold spells remain possible particularly late in the period.

## 1.7 Projections for river flows at key sites

By the end of March 2025, river flows are projected to have a greater than average chance of being above normal or higher in east, central, south-west and south-east England. In north-east England, river flows have the greatest chance of being normal or lower for the time of year.

By the end of September 2025, river flows are projected to have a greater than average chance of being above normal or higher in south-east, south-west and central England. In north-west and east England, river flows have the greatest chance of being normal or higher, while in north-east England, river flows have the greatest chance of being below normal or lower.

For scenario based projections of cumulative river flows at key sites by March 2025 see Figure 7.1.

For scenario based projections of cumulative river flows at key sites by September 2025 see Figure 7.2.

For probabilistic ensemble projections of cumulative river flows at key sites by March 2025 see Figure 7.3.

For probabilistic ensemble projections of cumulative river flows at key sites by September 2025 see Figure 7.4.

# 1.8 Projections for groundwater levels in key aquifers

By the end of March 2025, river flows are projected to have a greater than average chance of being above normal or higher in east, central, south-west and south-east England. In north-east England, river flows have the greatest chance of being normal or lower for the time of year.

By the end of September 2025, river flows are projected to have a greater than average chance of being above normal or higher in south-east, south-west and central England. In north-west and east England, river flows have the greatest chance of being normal or higher, while in north-east England, river flows have the greatest chance of being below normal or lower.

For scenario based projections of groundwater levels in key aquifers in March 2025 see Figure 7.5.

For scenario based projections of groundwater levels in key aquifers in September 2025 see Figure 7.6.

For probabilistic ensemble projections of groundwater levels in key aquifers in March 2025 see Figure 7.7.

For probabilistic ensemble projections of groundwater levels in key aquifers in September 2025 see Figure 7.8.

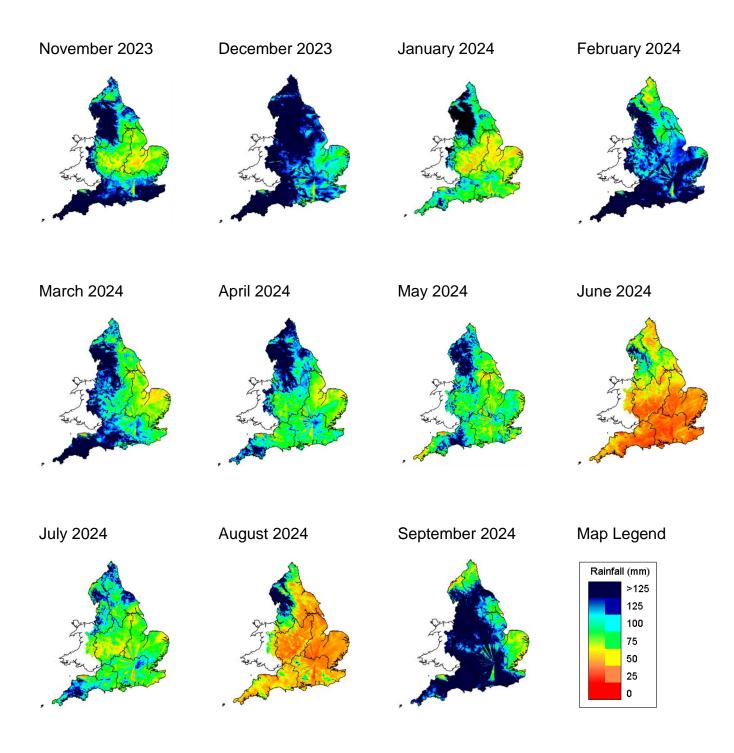
Author: National Water Resources Hydrology Team, <a href="mailto:nationalhydrology@environment-agency.gov.uk">nationalhydrology@environment-agency.gov.uk</a>

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# 2 Rainfall

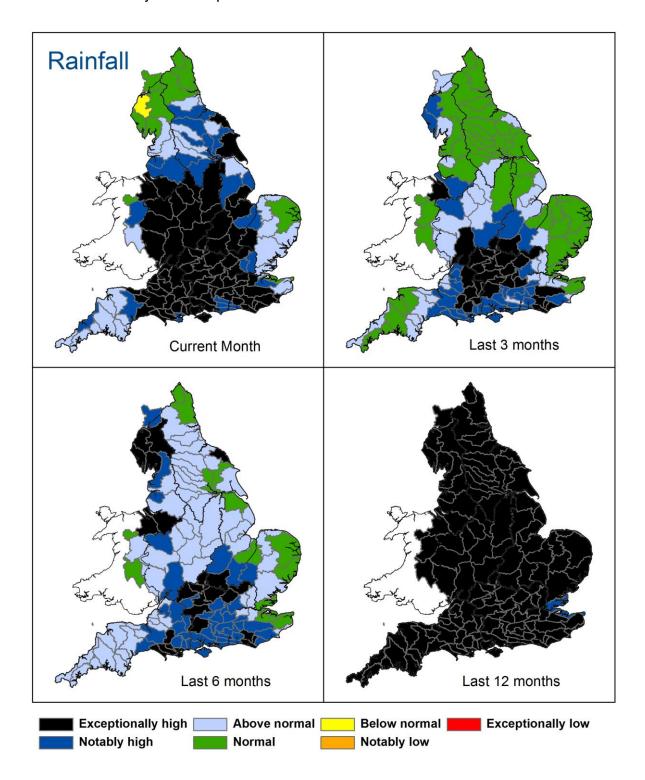
## 2.1 Rainfall map

Figure 2.1: Monthly rainfall across England and Wales for the past 11 months. UKPP radar data Note: Radar beam blockages in some regions may give anomalous totals in some areas.



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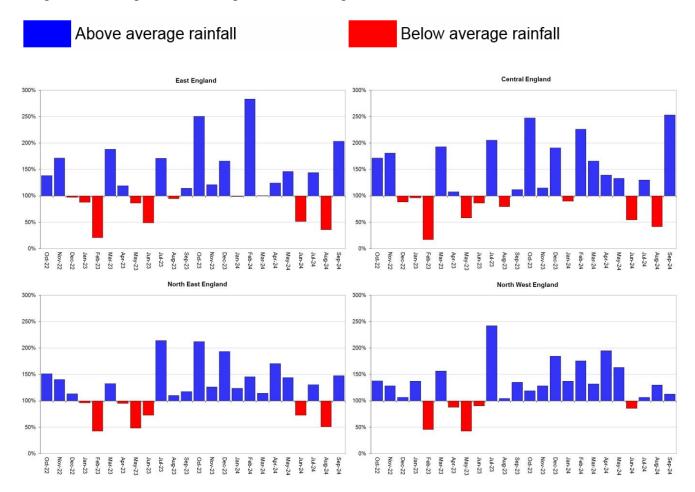
Figure 2.2: Total rainfall for hydrological areas across England for the current month (up to 30 September 2024), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals.

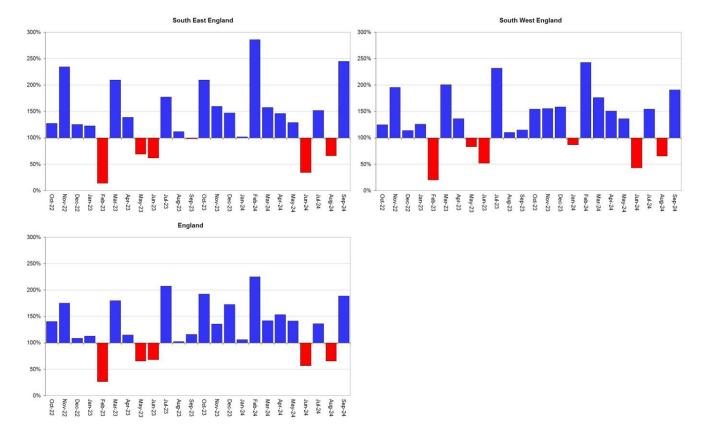


Rainfall data for 2023, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2024). Rainfall data prior to 2023, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2024).

## 2.2 Rainfall charts

Figure 2.3: Monthly rainfall totals for the past 24 months as a percentage of the 1961 to 1990 long term average for each region and for England.





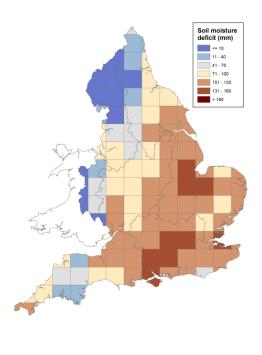
Rainfall data for 2023, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2024). Rainfall data prior to 2023, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2024).

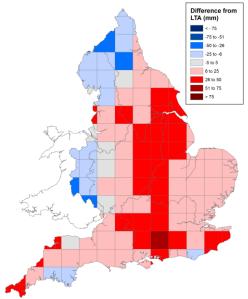
# 3 Soil moisture deficit

## 3.1 Soil moisture deficit map

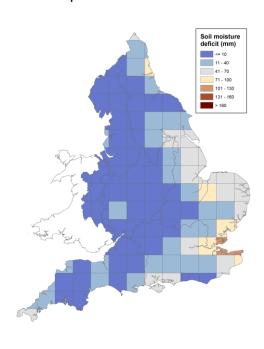
Figure 3.1: Soil moisture deficits for weeks ending, 28 August 2024 (left panel) and 02 October 2024 (right panel). Top row shows actual soil moisture deficits (mm) and bottom row shows the difference (mm) of the actual from the 1961 to 1990 long term average soil moisture deficits. MORECS data for real land use.

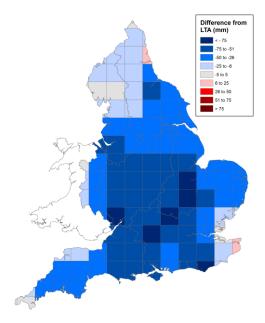
End of August 2024





## End of September 2024



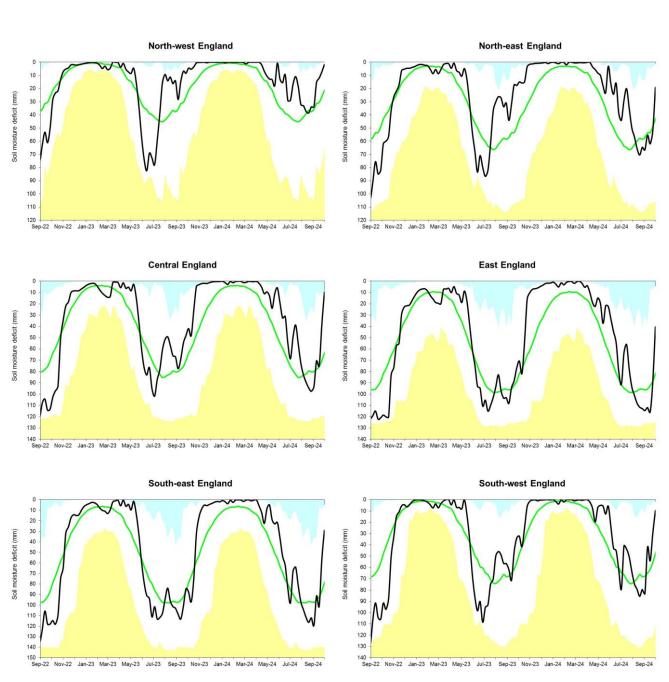


(Source: Met Office. Crown copyright, 2024). Crown copyright. All rights reserved. Environment Agency, 100024198, 2024.

## 3.2 Soil moisture deficit charts

Figure 3.2: Latest soil moisture deficits for all geographic regions compared to maximum, minimum and 1961 to 1990 long term average. Weekly MORECS data for real land use.





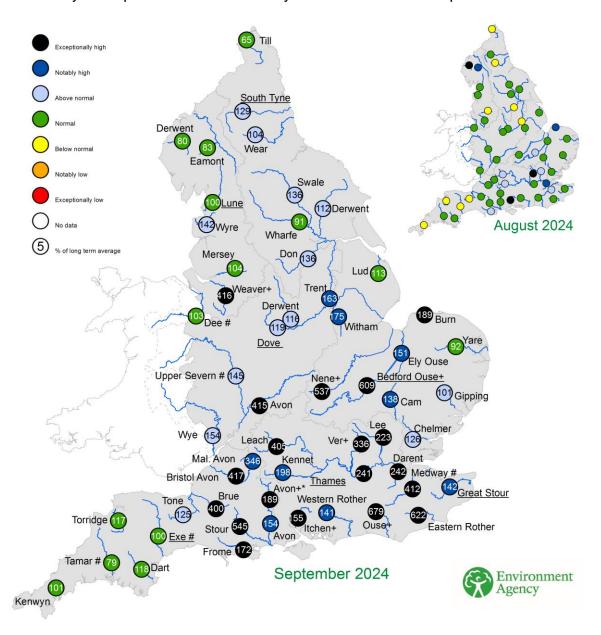
(Source: Met Office. Crown copyright, 2024).

## 4 River flows

# 4.1 River flow map

Figure 4.1: Monthly mean river flow for indicator sites for August 2024 and September 2024, expressed as a percentage of the respective long term average and classed relative to an analysis of historic August and September monthly means. Table available in the appendices with detailed information. Regional index sites are underlined and shown in the hydrographs in Figure 4.2.

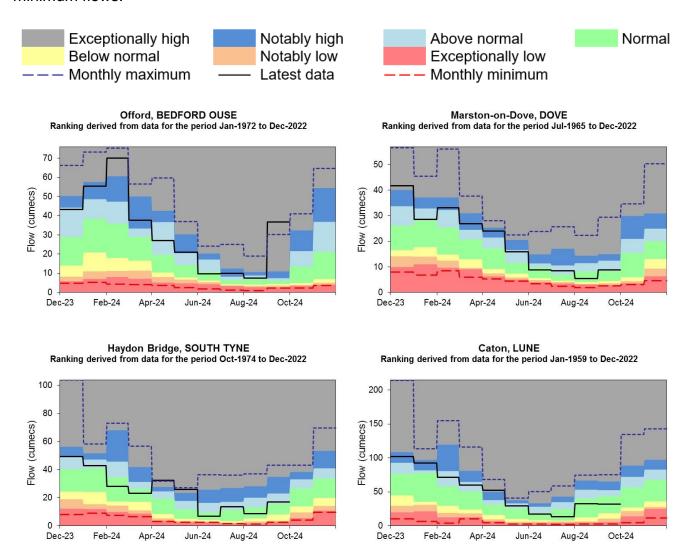
Naturalised flows are provided for the River Thames and the River Lee. +/- Monthly mean flow is the highest/lowest on record for the current month (note that record length varies between sites). \* Flows may be overestimated at these sites – data should be treated with caution. # Flows may be impacted at these sites by water releases from upstream reservoirs.



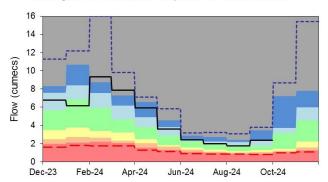
(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2024.

## 4.2 River flow charts

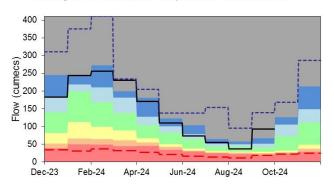
Figure 4.2: Monthly mean river flow for index sites over the past year for each geographic region, compared to an analysis of historic monthly mean flows, and long term maximum and minimum flows.



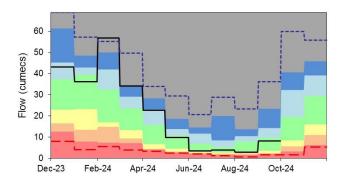
Horton, GREAT STOUR Ranking derived from data for the period Oct-1964 to Dec-2022



Kingston (naturalised), THAMES Ranking derived from data for the period Jan-1951 to Dec-2022



Thorverton, EXE Ranking derived from data for the period Apr-1956 to Dec-2022



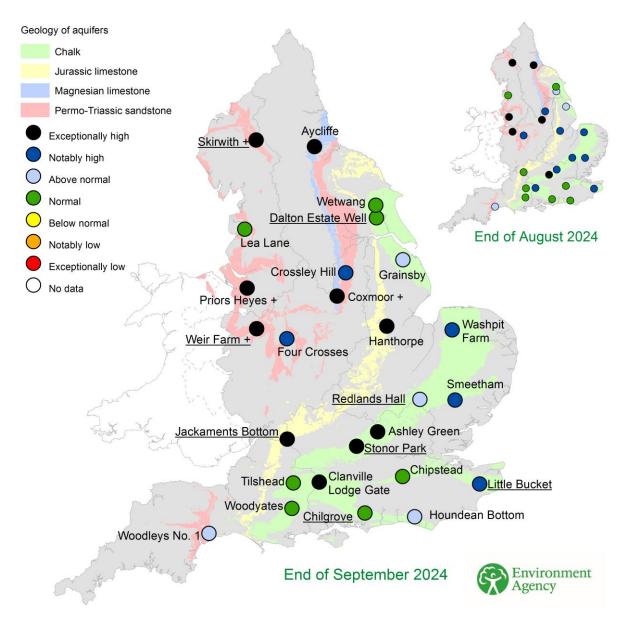
(Source: Environment Agency).

## 5 Groundwater levels

## 5.1 Groundwater levels map

Figure 5.1: Groundwater levels for indicator sites at the end of August 2024 and September 2024, classed relative to an analysis of respective historic August and September levels. Major aquifer index sites are underlined and shown in groundwater level charts in Figure 5.2.

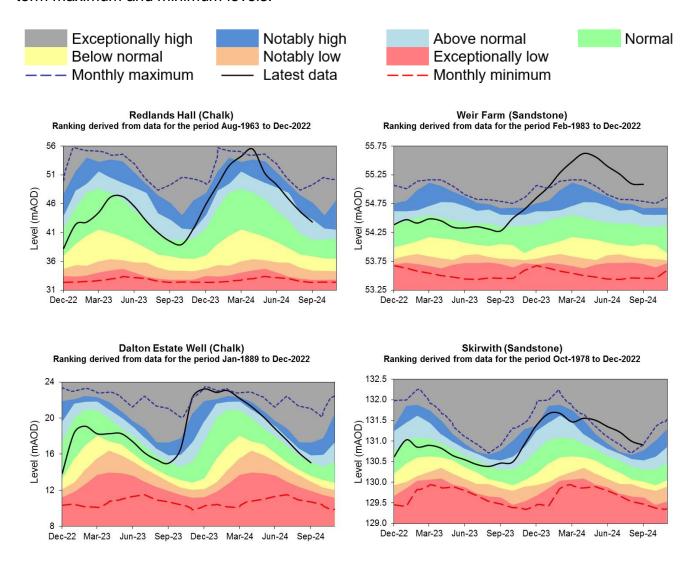
Redlands Hall and Aycliffe are manually dipped at different times during the month and so may not be fully representative of month end levels. Levels at Priors Heyes remain high compared to historic levels because the aquifer is recovering from the effects of historic abstraction. +/- End of month groundwater level is the highest/lowest on record for the current month (note that record length varies between sites).

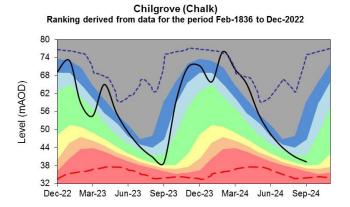


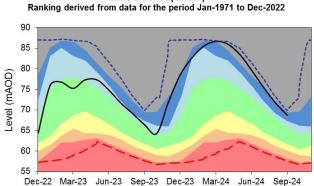
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## 5.2 Groundwater level charts

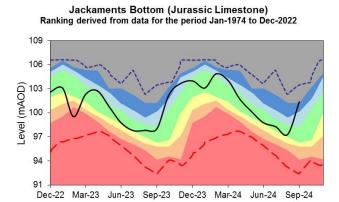
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. Past 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.

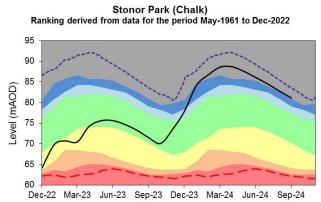






Little Bucket (Chalk)



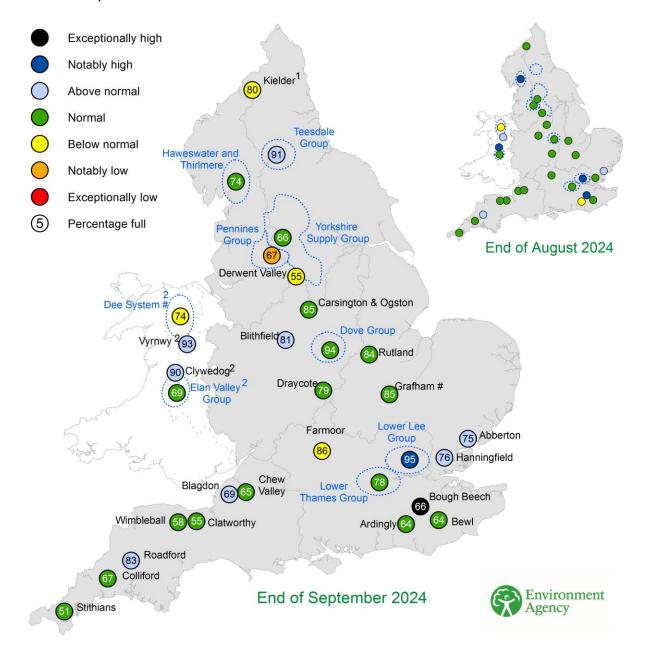


(Source: Environment Agency, 2024)

# 6 Reservoir storage

## 6.1 Reservoir storage map

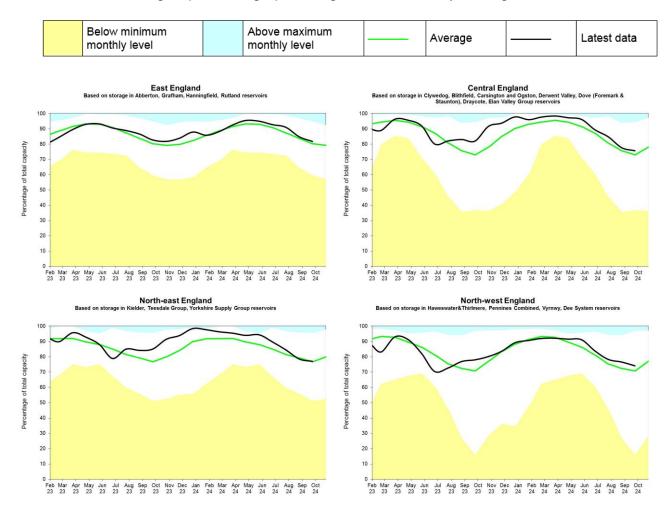
Figure 6.1: Reservoir stocks at key individual and groups of reservoirs at the end of August 2024 and September 2024 as a percentage of total capacity and classed relative to an analysis of historic August and September values respectively. Note: Classes shown may not necessarily relate to control curves or triggers for drought actions. As well as for public water supply, some reservoirs are drawn down to provide flood storage, river compensation flows or for reservoir safety inspections. In some cases current reservoir operating rules may differ from historic ones. The Dee system has been drawn down as part of reservoir safety works which are expected to continue until 2025.

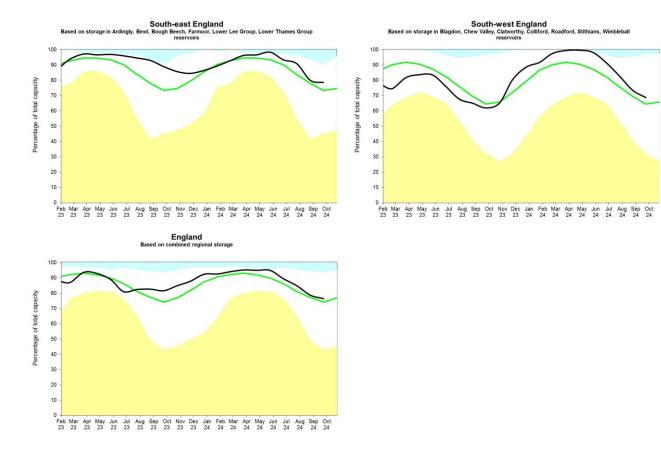


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## 6.2 Reservoir storage charts

Figure 6.2: Regional reservoir stocks. End of month reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs/reservoir groups making up the regional values vary in length.



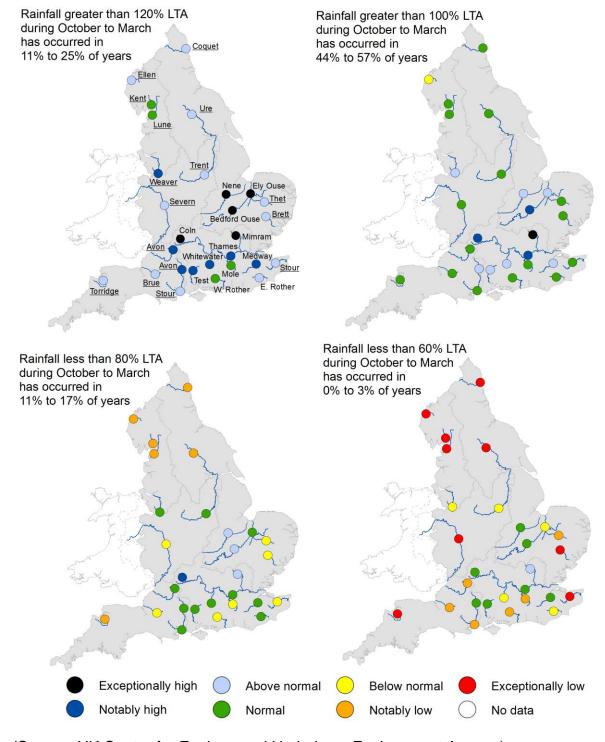


(Source: Water Companies).

## 7 Forward look

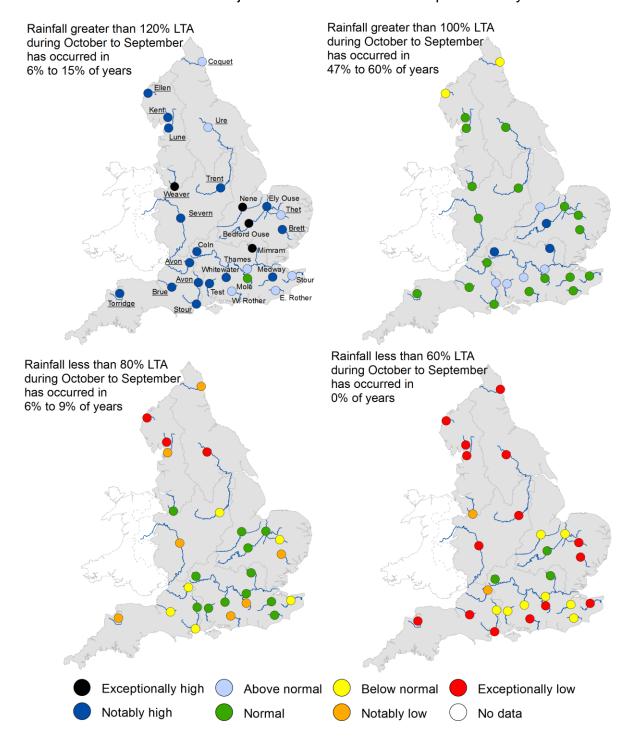
### 7.1 River flow

Figure 7.1: Projected river flows at key indicator sites up until the end of March 2025. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall between October 2024 and March 2025. Rainfall statistics based on occurrence in the historic record since 1871. Projections for underlined sites produced by CEH.



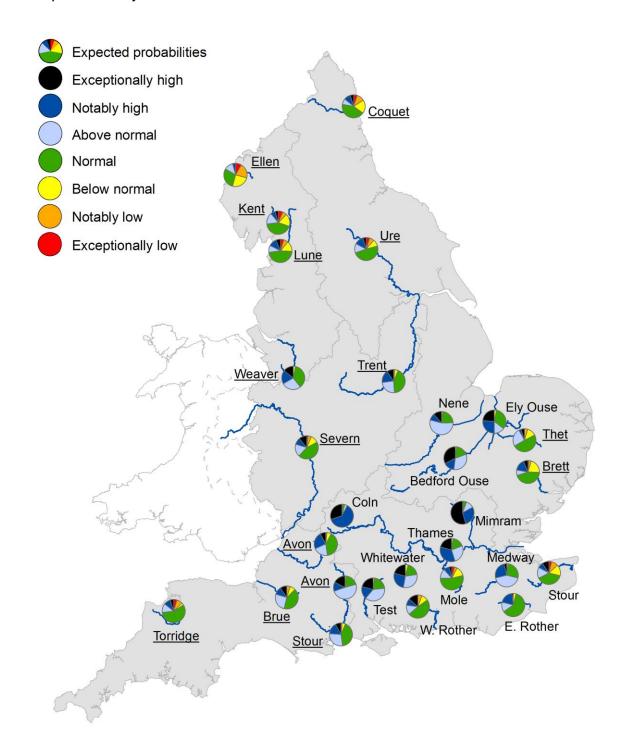
(Source: UK Centre for Ecology and Hydrology, Environment Agency).

Figure 7.2: Projected river flows at key indicator sites up until the end of September 2025. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall between October 2024 and September 2025. Rainfall statistics based on occurrence in the historic record since 1871. Projections for underlined sites produced by CEH.



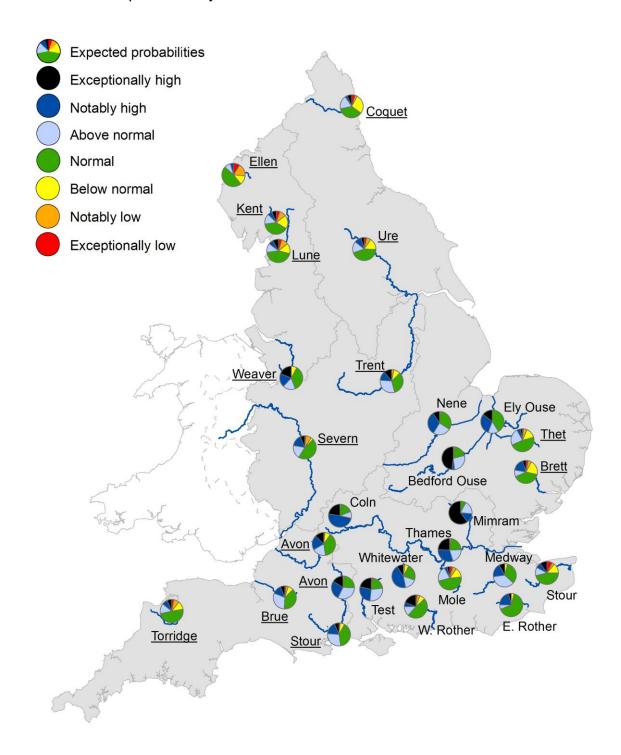
(Source: UK Centre for Ecology and Hydrology, Environment Agency)

Figure 7.3: Probabilistic ensemble projections of river flows at key indicator sites up until the end of March 2025. Pie charts indicate probability, based on climatology, of the surface water flow at each site being e.g. exceptionally low for the time of year. Projections for underlined sites produced by CEH.



(Source: UK Centre for Ecology and Hydrology, Environment Agency).

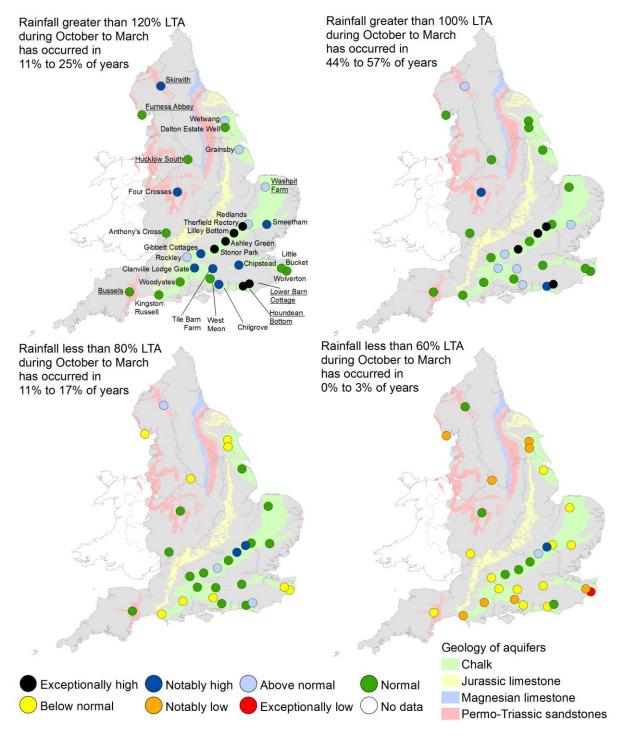
Figure 7.4: Probabilistic ensemble projections of river flows at key indicator sites up until the end of September 2025. Pie charts indicate probability, based on climatology, of the surface water flow at each site being e.g. exceptionally low for the time of year. Projections for underlined sites produced by CEH.



(Source: UK Centre for Ecology and Hydrology, Environment Agency).

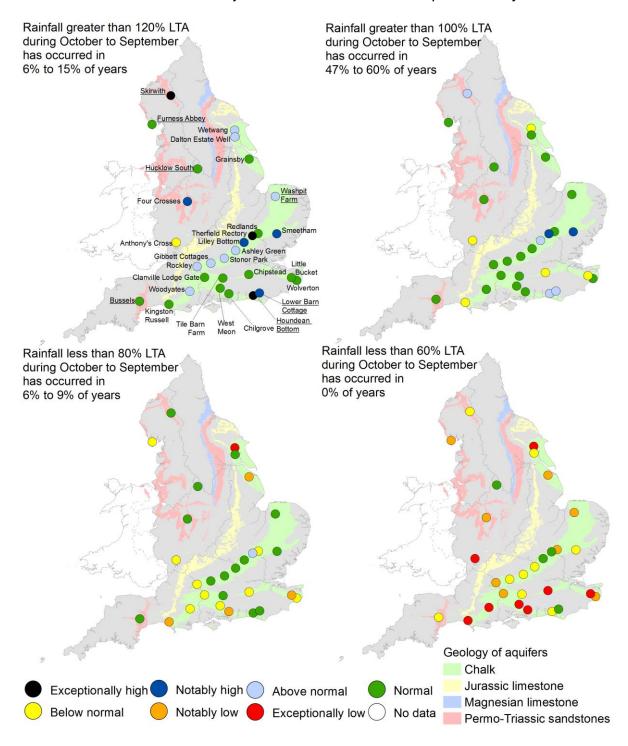
## 7.2 Groundwater

Figure 7.5: Projected groundwater levels at key indicator sites at the end of March 2025. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average between October 2024 and March 2025. Rainfall statistics based on occurrence in the historic record since 1871. Projections for underlined sites produced by BGS.



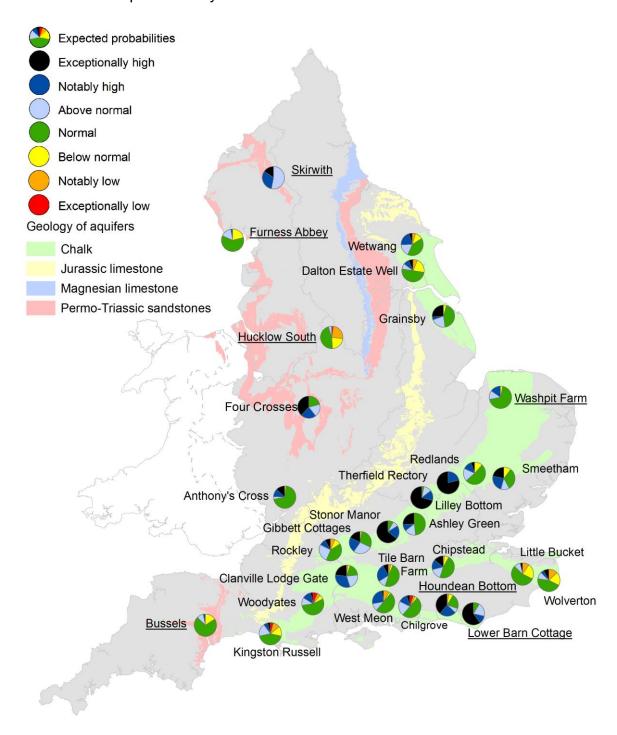
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Figure 7.6: Projected groundwater levels at key indicator sites at the end of September 2025. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall between October 2024 and September 2025. Rainfall statistics based on occurrence in the historic record since 1871. Projections for underlined sites produced by BGS.



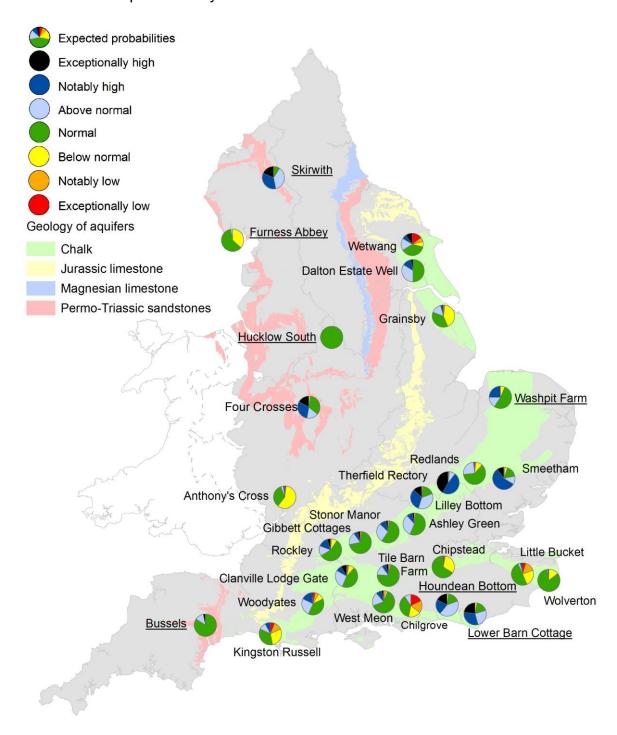
(Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum BGS © NERC Crown copyright. All rights reserved. Environment Agency 100024198 2024.

Figure 7.7: Probabilistic ensemble projections of groundwater levels at key indicator sites at the end of March 2025. Pie charts indicate probability, based on climatology, of the groundwater level at each site being e.g. exceptionally low for the time of year. Projections for underlined sites produced by BGS.



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Figure 7.8: Probabilistic ensemble projections of groundwater levels at key indicator sites at the end of September 2025. Pie charts indicate probability, based on climatology, of the groundwater level at each site being e.g. exceptionally low for the time of year. Projections for underlined sites produced by BGS.



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# 8 Glossary

## 8.1 Terminology

## **Aquifer**

A geological formation able to store and transmit water.

## Areal average rainfall

The estimated average depth of rainfall over a defined area. Expressed in depth of water (mm).

#### **Artesian**

The condition where the groundwater level is above ground surface but is prevented from rising to this level by an overlying continuous low permeability layer, such as clay.

#### Artesian borehole

Borehole where the level of groundwater is above the top of the borehole and groundwater flows out of the borehole when unsealed.

#### **Cumecs**

Cubic metres per second (m<sup>3</sup>s<sup>-1</sup> or m<sup>3</sup>/s).

### **Effective rainfall**

The rainfall available to percolate into the soil or produce river flow. Expressed in depth of water (mm).

## Flood alert and flood warning

Three levels of warnings may be issued by the Environment Agency. Flood Alerts indicate flooding is possible. Flood Warnings indicate flooding is expected. Severe Flood Warnings indicate severe flooding.

#### Groundwater

The water found in an aquifer.

#### Long term average (LTA)

The arithmetic mean calculated from the historic record, usually based on the period 1961-1990. However, the period used may vary by parameter being reported on (see figure captions for details).

#### **mAOD**

Metres above ordnance datum (mean sea level at Newlyn Cornwall).

#### **MORECS**

Met Office Rainfall and Evaporation Calculation System. Met Office service providing real time calculation of evapotranspiration, soil moisture deficit and effective rainfall on a 40 x 40 km grid.

#### Naturalised flow

River flow with the impacts of artificial influences removed. Artificial influences may include abstractions, discharges, transfers, augmentation and impoundments.

#### **NCIC**

National Climate Information Centre. NCIC area monthly rainfall totals are derived using the Met Office 5 km gridded dataset, which uses rain gauge observations.

### Recharge

The process of increasing the water stored in the saturated zone of an aquifer. Expressed in depth of water (mm).

#### Reservoir gross capacity

The total capacity of a reservoir.

#### Reservoir live capacity

The capacity of the reservoir that is normally usable for storage to meet established reservoir operating requirements. This excludes any capacity not available for use (e.g. storage held back for emergency services, operating agreements or physical restrictions). May also be referred to as 'net' or 'deployable' capacity.

## Soil moisture deficit (SMD)

The difference between the amount of water actually in the soil and the amount of water the soil can hold. Expressed in depth of water (mm).

## 8.2 Categories

**Exceptionally high:** Value likely to fall within this band 5% of the time.

**Notably high:** Value likely to fall within this band 8% of the time.

**Above normal:** Value likely to fall within this band 15% of the time.

**Normal:** Value likely to fall within this band 44% of the time.

Below normal: Value likely to fall within this band 15% of the time.

**Notably low:** Value likely to fall within this band 8% of the time.

**Exceptionally low:** Value likely to fall within this band 5% of the time.

## 8.3 Geographic regions

Throughout this report regions of England are used to group Environment Agency areas together. Below the areas in each region are listed, and Figure 8.1 shows the geographical extent of these regions.

**East includes:** Cambridgeshire and Bedfordshire, Lincolnshire and Northamptonshire, and Essex, Norfolk and Suffolk areas.

**South east includes:** Solent and South Downs, Hertfordshire and North London, Thames, and Kent and South London areas.

**South west includes:** Devon and Cornwall, and Wessex areas.

**Central includes:** Shropshire, Herefordshire, Worcestershire and Gloucestershire, Staffordshire, Warwickshire and West Midlands, and Derbyshire, Nottinghamshire and Leicestershire areas.

**North west includes:** Cumbria and Lancashire, and Greater Manchester, Merseyside and Cheshire areas.

North east includes: Yorkshire, and Northumberland Durham and Tees areas.

Figure 8.1: Geographic regions



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# 9 Appendices

# 9.1 Rainfall table

| Region                | Sep 2024<br>rainfall % of<br>long term<br>average 1961<br>to 1990 | Sep 2024<br>band      | Jul 2024 to<br>September<br>2024<br>cumulative<br>band | Apr 2024 to<br>September<br>2024<br>cumulative<br>band | Oct 2023 to<br>September<br>2024<br>cumulative<br>band |
|-----------------------|---|-----------------------|--|--|--|
| East England          | 203   | Notably High          | Normal   | Normal   | Exceptionally high                                     |
| Central<br>England    | 253   | Exceptionally<br>High | Above<br>normal  | Above<br>normal  | Exceptionally high                                     |
| North East<br>England | 148   | Above<br>Normal       | Normal   | Above<br>normal  | Exceptionally high                                     |
| North West<br>England | 113   | Normal                | Above<br>normal  | Exceptionally high                                     | Exceptionally high                                     |
| South East<br>England | 245   | Exceptionally<br>High | Notably high   | Notably high   | Exceptionally high                                     |
| South West<br>England | 191   | Notably High          | Above<br>normal  | Above<br>normal  | Exceptionally high                                     |
| England               | 189   | Exceptionally<br>High | Above<br>normal  | Above<br>normal  | Exceptionally high                                     |

# 9.2 River flows table

| Geographic<br>area | Site name           | River        | Sep 2024<br>band   | Aug 2024<br>band |
|--------------------|---------------------|--------------|--------------------|------------------|
| East               | Burnham             | Burn         | Exceptionally high | Notably high     |
| East               | Claypole            | Upper Witham | Notably high       | Normal           |
| East               | Colney              | Yare         | Normal             | Normal           |
| East               | Denver              | Ely Ouse     | Notably high       | Normal           |
| East               | Dernford            | Cam          | Notably high       | Normal           |
| East               | Louth Weir          | Lud          | Normal             | Normal           |
| East               | Offord              | Bedford Ouse | Exceptionally high | Above normal     |
| East               | Springfield         | Chelmer      | Above normal       | Normal           |
| East               | Stowmarket          | Gipping      | Above normal       | Normal           |
| East               | Upton Mill          | Nene         | Exceptionally high | Normal           |
| Central            | Bewdley             | Severn       | Above normal       | Normal           |
| Central            | Derby St.<br>Marys  | Derwent      | Above normal       | Normal           |
| Central            | Evesham             | Avon         | Exceptionally high | Normal           |
| Central            | Marston-on-<br>dove | Dove         | Above normal       | Normal           |

| Central    | North<br>Muskham         | Trent      | Notably high       | Below normal       |
|------------|--------------------------|------------|--------------------|--------------------|
| North East | Buttercrambe             | Derwent    | Above normal       | Normal             |
| North East | Crakehill<br>Topcliffe   | Swale      | Above normal       | Normal             |
| North East | Heaton Mill              | Till       | Normal             | Below normal       |
| North East | Doncaster                | Don        | Above normal       | Below normal       |
| North East | Haydon Bridge            | South Tyne | Above normal       | Normal             |
| North East | Tadcaster                | Wharfe     | Normal             | Normal             |
| North East | Witton Park              | Wear       | Above normal       | Below normal       |
| North West | Ashton Weir              | Mersey     | Normal             | Below normal       |
| North West | Caton                    | Lune       | Normal             | Normal             |
| North West | Ouse Bridge              | Derwent    | Normal             | Exceptionally high |
| North West | Pooley Bridge            | Eamont     | Normal             | Notably high       |
| North West | St Michaels              | Wyre       | Above normal       | Normal             |
| North West | Ashbrook                 | Weaver     | Exceptionally high | Normal             |
| South East | Allbrook &<br>Highbridge | Itchen     | Exceptionally high | Exceptionally high |
| South East | Ardingley                | Ouse       | Exceptionally high | Normal             |
| South East | Feildes Weir             | Lee        | Exceptionally high | Above normal       |

| South East | Hansteads                 | Ver         | Exceptionally high | Exceptionally high |
|------------|---------------------------|-------------|--------------------|--------------------|
| South East | Hawley                    | Darent      | Exceptionally high | Notably high       |
| South East | Horton                    | Great Stour | Notably high       | Normal             |
| South East | Kingston<br>(naturalised) | Thames      | Exceptionally high | Normal             |
| South East | Lechlade                  | Leach       | Exceptionally high | Above normal       |
| South East | Marlborough               | Kennet      | Notably high       | Above normal       |
| South East | Princes Marsh             | Rother      | Notably high       | Normal             |
| South East | Teston &<br>Farleigh      | Medway      | Exceptionally high | Above normal       |
| South East | Udiam                     | Rother      | Exceptionally high | Normal             |
| South West | Amesbury                  | Upper Avon  | Exceptionally high | Normal             |
| South West | Austins Bridge            | Dart        | Normal             | Normal             |
| South West | Bathford                  | Avon        | Exceptionally high | Normal             |
| South West | Bishops Hull              | Tone        | Above normal       | Below normal       |
| South West | East Stoke                | Frome       | Exceptionally high | Above normal       |
| South West | Great<br>Somerford        | Avon        | Notably high       | Normal             |
| South West | Gunnislake                | Tamar       | Normal             | Normal             |

| South West | Hammoon     | Middle Stour | Exceptionally high | Normal       |
|------------|-------------|--------------|--------------------|--------------|
| South West | East Mills  | Middle Avon  | Notably high       | Normal       |
| South West | Lovington   | Upper Brue   | Exceptionally high | Normal       |
| South West | Thorverton  | Exe          | Normal             | Below normal |
| South West | Torrington  | Torridge     | Normal             | Below normal |
| South West | Truro       | Kenwyn       | Normal             | Below normal |
| EA Wales   | Manley Hall | Dee          | Normal             | Normal       |
| EA Wales   | Redbrook    | Wye          | Above normal       | Normal       |

# 9.3 Groundwater table

| Geographic<br>area | Site name                        | Aquifer                                | End of Sep<br>2024 band | End of Aug<br>2024 band |
|--------------------|----------------------------------|--|-------------------------|-------------------------|
| East               | Grainsby                         | Grimsby<br>Ancholme Louth<br>Chalk     | Above<br>normal         | Above normal            |
| East               | Redlands<br>Hall (chalk)         | Cam Chalk                              | Above<br>normal         | Notably high            |
| East               | Hanthorpe                        | Cornbrash<br>(South)                   | Exceptionally high      | Notably high            |
| East               | Smeetham<br>Hall Cott.           | North Essex<br>Chalk                   | Notably high            | Notably high            |
| East               | Washpit<br>Farm<br>Rougham       | North West<br>Norfolk Chalk            | Notably high            | Notably high            |
| Central            | Four<br>Crosses                  | Grimsby<br>Ancholme Louth<br>Limestone | Notably high            | Notably high            |
| Central            | Weir Farm<br>(sandstone)         | Bridgnorth<br>Sandstone<br>Formation   | Exceptionally high      | Exceptionally high      |
| Central            | Coxmoor                          | Permo Triassic<br>Sandstone            | Exceptionally high      | Exceptionally high      |
| Central            | Crossley<br>Hill                 | Permo Triassic<br>Sandstone            | Notably high            | Notably high            |
| North East         | Dalton<br>Estate Well<br>(chalk) | Hull & East<br>Riding Chalk            | Normal                  | Above normal            |

| North East | Aycliffe<br>Nra2                                | Skerne<br>Magnesian<br>Limestone                                 | Exceptionally high | Exceptionally high |
|------------|---|--|--------------------|--------------------|
| North East | Wetwang   | Hull & East<br>Riding Chalk                                      | Normal             | Normal             |
| North West | Priors<br>Heyes                                 | West Cheshire<br>Permo-Triassic<br>Sandstone                     | Exceptionally high | Exceptionally high |
| North West | Skirwith<br>(sandstone)                         | Eden Valley and<br>Carlisle Basin<br>Permo-Triassic<br>Sandstone | Exceptionally high | Exceptionally high |
| North West | Lea Lane  | Fylde Permo-<br>Triassic<br>Sandstone                            | Normal             | Normal             |
| South East | Chilgrove<br>(chalk)                            | Chichester-<br>Worthing-<br>Portsdown<br>Chalk                   | Normal             | Normal             |
| South East | Clanville<br>Gate Gwl                           | River Test Chalk   | Exceptionally high | Notably high       |
| South East | Houndean<br>Bottom Gwl                          | Brighton Chalk<br>Block  | Above<br>normal    | Normal             |
| South East | Little Bucket (chalk)                           | East Kent Chalk<br>- Stour                                       | Notably high       | Notably high       |
| South East | Jackaments<br>Bottom<br>(jurassic<br>Limestone) | Burford Oolitic<br>Limestone<br>(Inferior)                       | Exceptionally high | Normal             |
| South East | Ashley<br>Green Stw<br>Obh                      | Mid-Chilterns<br>Chalk   | Exceptionally high | Notably high       |

| South East | Stonor Park<br>(chalk) | South-West<br>Chilterns Chalk      | Exceptionally high | Exceptionally high |
|------------|------------------------|------------------------------------|--------------------|--------------------|
| South East | Chipstead<br>Gwl       | Epsom North<br>Downs Chalk         | Normal             | Normal             |
| South West | Tilshead               | Upper<br>Hampshire Avon<br>Chalk   | Normal             | Normal             |
| South West | Woodleys<br>No1        | Otterton<br>Sandstone<br>Formation | Above<br>normal    | Above normal       |
| South West | Woodyates              | Dorset Stour<br>Chalk              | Normal             | Normal             |

# 9.4 Reservoir table

| Geographic region | % Full | Average comparison |
|-------------------|--------|--------------------|
| East              | 82     | Above average      |
| Central           | 76     | Above average      |
| North-east        | 77     | Above average      |
| North-west        | 74     | Above average      |
| South-east        | 79     | Above average      |
| South-west        | 69     | Above average      |
| England           | 76     | Above average      |