

# Monthly water situation report: England

## 1 Summary - August 2023

August rainfall totals were in the normal range across most of England, with almost two-thirds of catchments receiving above average rainfall, and the remaining catchments recording below average rainfall. This mixed picture was reflected in soil moisture deficits with wetter than expected soils in the south-west and northern England, and drier than expected soils in the east and south-east. River flows reduced at many sites as rivers recovered from very wet conditions in July, although the majority of sites recorded above normal or higher monthly mean flows. Groundwater levels decreased at almost all sites, as is expected in the late summer, and two-thirds were classed as normal for the time of year. Reservoir stocks declined at two-thirds of the reservoirs or reservoir groups we report on, with almost half of reservoirs classed as normal for the time of year.

### 1.1 Rainfall

The August rainfall total for England was 72mm which represents 102% of the 1961 to 1990 long term average (LTA) for the time of year (96% of the 1991 to 2020 LTA). Two-thirds of catchments received average or above average rainfall during August, while the remaining third received below average rainfall. The wettest hydrological area relative to the LTA was the Isle of Wight on the south coast which received 167% of LTA rainfall. The driest hydrological area was the Soar catchment in central England which received 64% of LTA rainfall in August. (Figure 2.1)

August rainfall totals were classed as normal for the time of year in almost all catchments across England. Eleven hydrological areas in north-east, east and south-east England were classed as above normal for the time of year. In central England and the far north of England 5 hydrological areas received below normal rainfall during August. All regions received normal rainfall in August, as did England as whole. (Figure 2.2)

The 3 month cumulative rainfall totals were normal for most of central, east and south-east England. In south-west, north-west and north-east England cumulative rainfall totals for June to August were above normal or higher, with exceptionally high totals in parts of the north-west. The 6 month cumulative rainfall totals were above normal or higher across almost all of England, with a handful of hydrological areas recording normal cumulative rainfall totals for the period. The south-west and north-west were particularly wet over the March to August period, with exceptionally high cumulative rainfall totals in many catchments. The twelve month cumulative rainfall totals tell a similar story, with above normal or higher totals in the majority of catchments. Much of the south coast and parts of the north-west recorded exceptionally high rainfall totals over the past twelve months, with England as a whole recording notably high cumulative rainfall. (Figure 2.3)

## 1.2 Soil moisture deficit

Soil moisture deficits (SMD) were similar at the end of August to where they had been at the end of July. Parts of south-east and east England saw a slight increase in SMD by the end of August, while parts of the north-east saw SMDs decrease. This strengthened the north-west to south-east divide, with drier soils in the south-east and wetter ones in the north-west. (Figure 3.1)

SMDs in the south-east and east were above the LTA in many places, meaning soils were drier than would be expected for the time of year. In comparison in the south-west, central, north-west and north-east of England SMDs were below the LTA, leaving soils wetter than expected at the end of August. (Figure 3.2)

## 1.3 River flows

August monthly mean river flows decreased at more than half of all indicator sites we report on, while the remaining sites recorded increases in monthly mean river flows. The majority of sites were above normal or higher for the time of year, with the remainder being normal or below normal. All 3 below normal sites were in south-east and east England. The River Derwent and River Wear in the north-east, the River Weaver in the north-west and the River Brue in south-west England all had monthly mean river flows classed as notably high for the time of year. (Figure 4.1)

Monthly mean river flows decreased at all except one of the regional index sites in August, with Thornton on the River Exe in south-west England seeing an increase in flows which meant it was classed as above normal for the time of year. Naturalised flows on the River Thames in the south-east and South Tyne in the north-east were also above normal for the time of year. The Great Ouse in south-east England, the River Lune in north-west England, the River Dove in central England and the Bedford Ouse in east England all recorded normal monthly mean river flows for the time of year. (Figure 4.2)

## 1.4 Groundwater levels

By the end of August groundwater levels had decreased at almost all of the indicator sites we report on. At 3 sites groundwater levels remained the same between the end of July and the end of August. Almost two-thirds of groundwater sites were classed as normal for the time of year at the end of August. The remaining sites were all above normal or higher. Clanville Lodge Gate in the Test Chalk in south-east England was notably high while Washpit Farm in the North West Norfolk Chalk in east England was below normal for the time of year. Groundwater levels in the West Cheshire Sandstone at Priors Heyes in north-west England continue to recover from the effects of historic abstraction and remain in the exceptionally high classification. (Figure 5.1)

The major aquifer index sites reflected this largely normal picture, with just 2 sites above normal for the time of year, Skirwith in the Carlisle Basin and Eden Valley Sandstone and Little Bucket in the East Kent Stour Chalk. Chilgrove in the Chichester Chalk returned to normal

levels for the first time since it saw rapid increases in groundwater levels in the spring. The remaining major aquifer index sites were all normal for the time of year. (Figure 5.2)

## 1.5 Reservoir storage

Reservoir storage during August declined at more than two-thirds of the reservoirs or reservoir groups we report on, although most reservoirs saw storage changes of less than 5%. Three reservoirs or reservoir groups recorded unseasonal increases of storage greater than 10%, Teesdale group in north-east England, Haweswater and Thirlmere in north-west England and Vyrnwy in north Wales which part supplies north-west England. At the end of August these changes meant that almost half of the reservoirs and reservoir groups we report on were classed as normal for the time of year. Four sites were below normal or lower, with Colliford and Roadford in south-west England below normal for the time of year, while Kielder in the north-east was also below normal and the Dee System in Wales was notably low as a result of ongoing engineering works. In contrast, more than a third of reservoirs were above normal or higher for the time of year, including 7 reservoirs classed as above normal, and 5 classed as notably high or higher at the end of August. (Figure 6.1)

At a regional scale, total reservoir storage decreased in east, north-east, south-east and south-west England. In central and north-west England total reservoir storage increased slightly at the end of August. For England as a whole total reservoir storage has remained the same between July and August at 82%. (Figure 6.2)

## 1.6 Forward look

Although average rainfall and temperature is forecast, the early and mid-September period is likely to experience unsettled conditions, varying from scattered showers to warm sunny spells across the country. Northern England is expected to experience greater rainfall and more frequent changes in weather than the south. Conditions are likely to remain changeable throughout September, with a higher likelihood of unseasonably warm dry spells towards the end of the month.

For the UK for the 3 month period from September to November there is a higher than usual chance of warmer weather, although near average temperatures are most likely. The likelihood of either a wet or dry period are similar to expected for the time of year.

## 1.7 Projections for river flows at key sites

By the end of September 2023, the majority of rivers throughout England have a greater likelihood of experiencing either above normal or normal flows, Stiffkey in east England, is the only river where projections show a high likelihood of below normal flows. September projections show a split with a greater chance of lower flows throughout east England and higher flows in the west. A similar trend can be observed in the projections through to March 2024; where the majority of rivers across England are likely to experience normal flows or greater, while rivers in the east and south-east have an increased chance of experiencing below normal flows compared to the rest of the country.

For scenario based projections of cumulative river flows at key sites by September 2023 see Figure 7.1.

For scenario based projections of cumulative river flows at key sites by March 2024 see Figure 7.2.

For probabilistic ensemble projections of cumulative river flows at key sites by September 2023 see Figure 7.3.

For probabilistic ensemble projections of cumulative river flows at key sites by March 2024 see Figure 7.4.

## **1.8 Projections for groundwater levels in key aquifers**

By the end of September 2023, groundwater levels are most likely to be in their expected range across the majority of England. Groundwater levels in south-east, south-west and north-east of England have a greater likelihood of experiencing above normal or higher levels.

By the end of March 2024, groundwater levels throughout England are expected to be normal. With sites located along the eastern coast and south-east more likely to experience below normal levels. However, sites supported by the Chalk aquifer in the south-east of England are likely to experience above normal or greater levels. Skirwith in the north-west is the only location with a high likelihood of notably high groundwater levels.

For scenario based projections of groundwater levels in key aquifers in September 2023 see Figure 7.5.

For scenario based projections of groundwater levels in key aquifers in March 2024 see Figure 7.6.

For probabilistic ensemble projections of groundwater levels in key aquifers in September 2023 see Figure 7.7.

For probabilistic ensemble projections of groundwater levels in key aquifers in March 2024 see Figure 7.8.

Author: National Water Resources Hydrology Team, [Nationalhydrology@environment-agency.gov.uk](mailto:Nationalhydrology@environment-agency.gov.uk) 03708 506 506

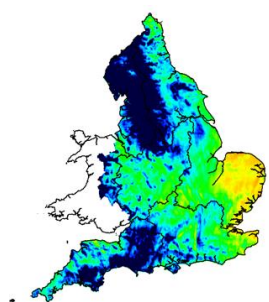
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## 2 Rainfall

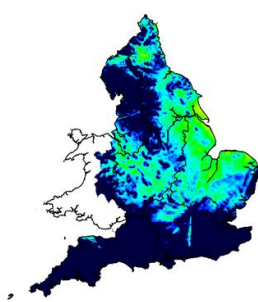
### 2.1 Rainfall map

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.

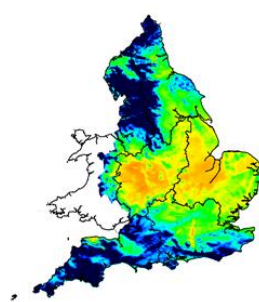
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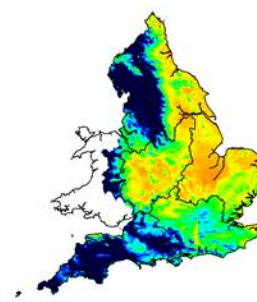
November 2022



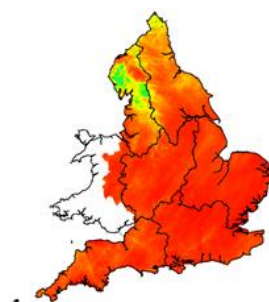
December 2022



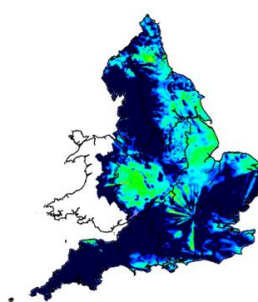
January 2023



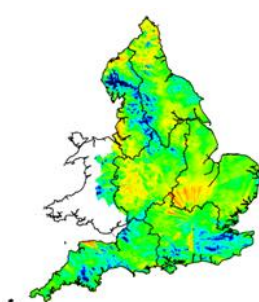
February 2023



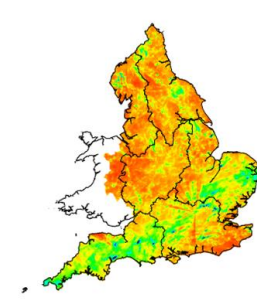
March 2023



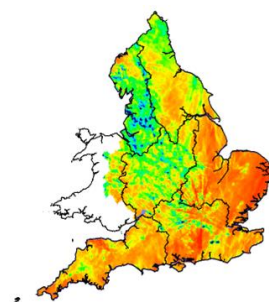
April 2023



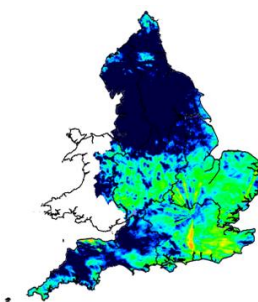
May 2023



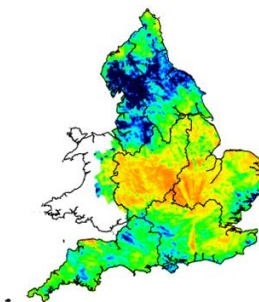
June 2023



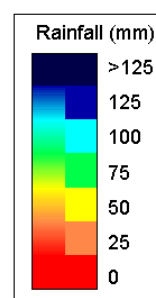
July 2023



August 2023

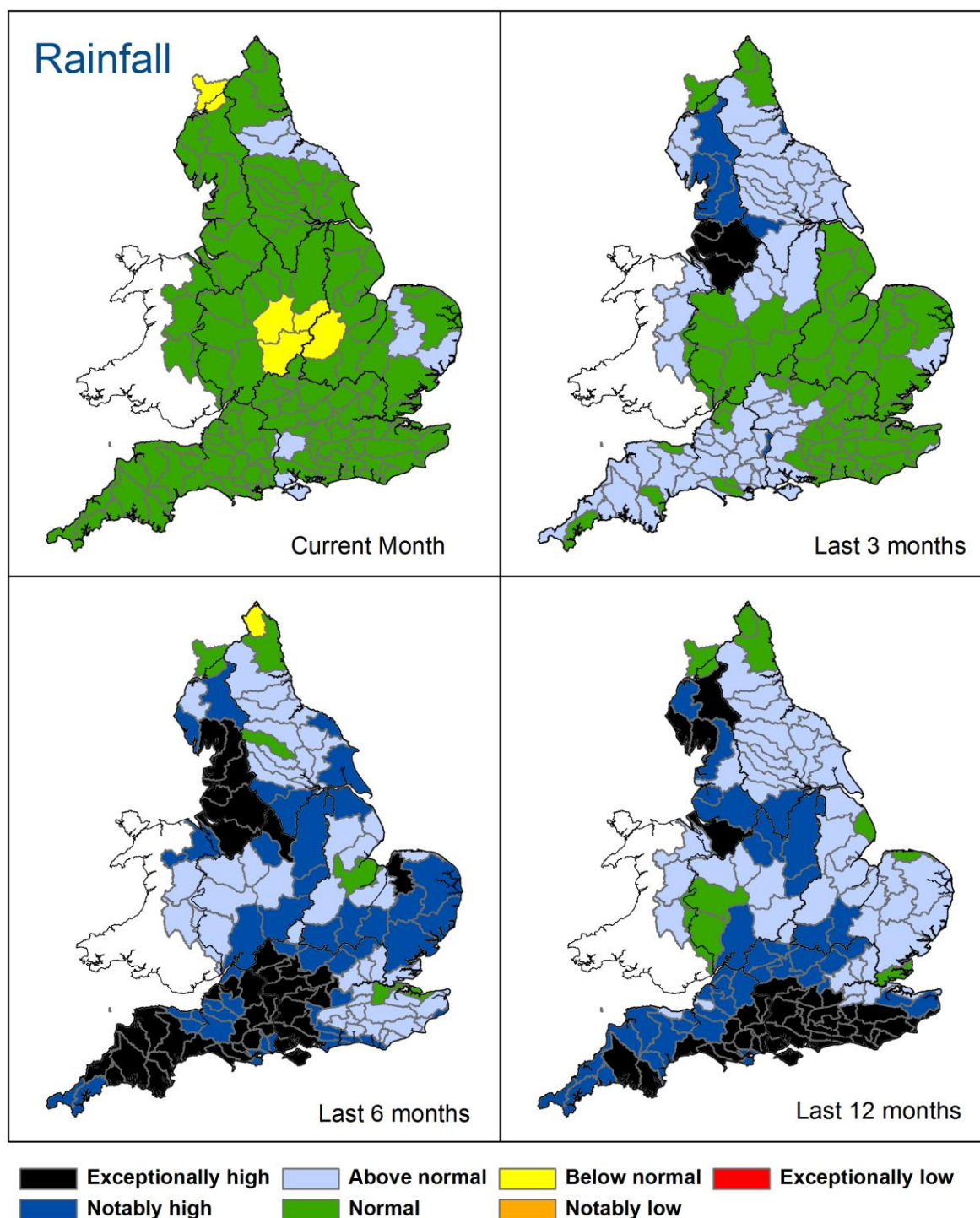


Map Legend



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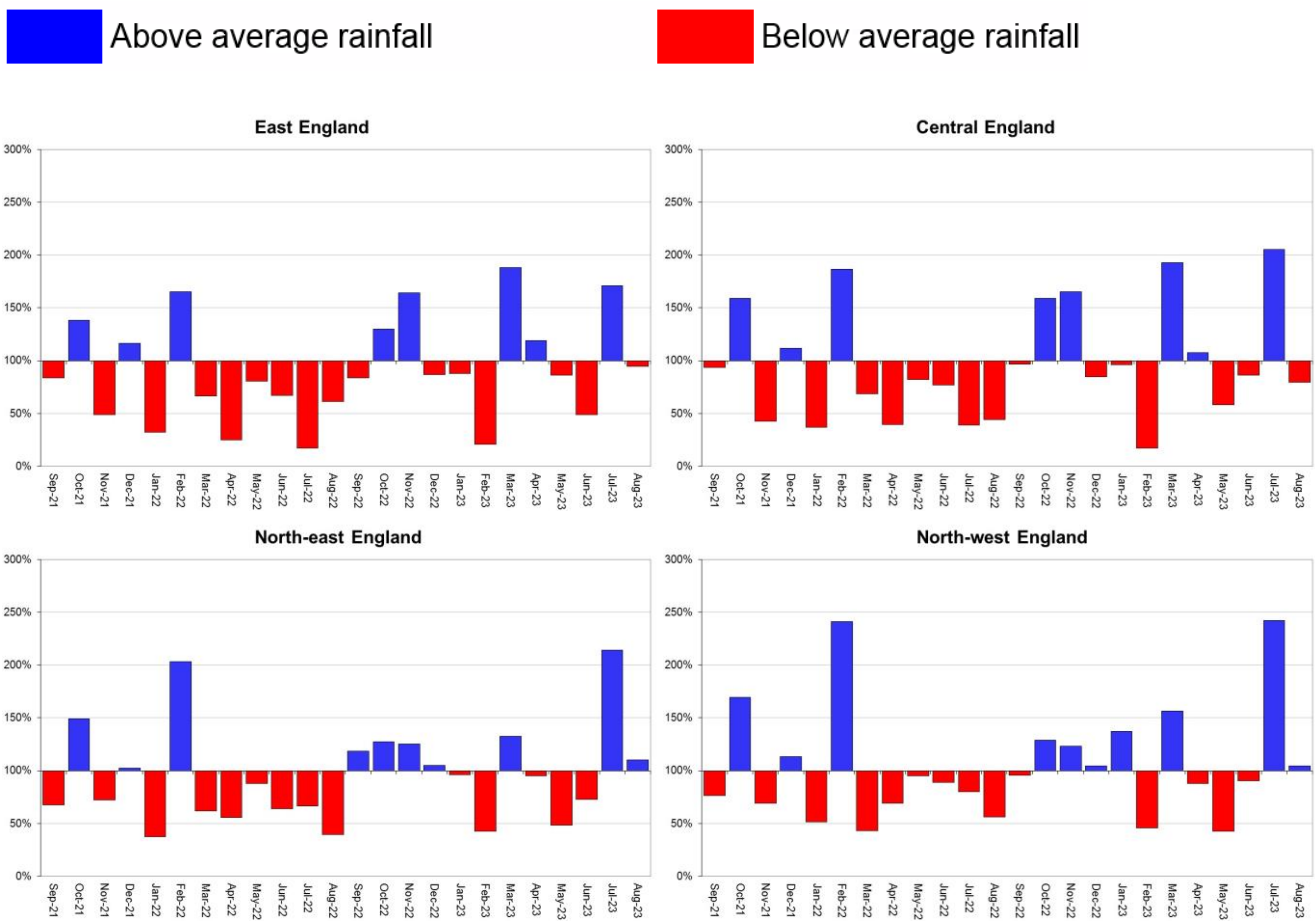
Figure 2.2: Total rainfall for hydrological areas across England for the current month (up to 31 August 2023), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals.

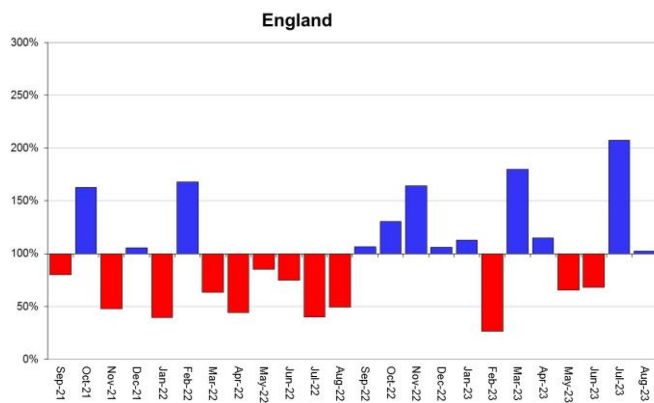
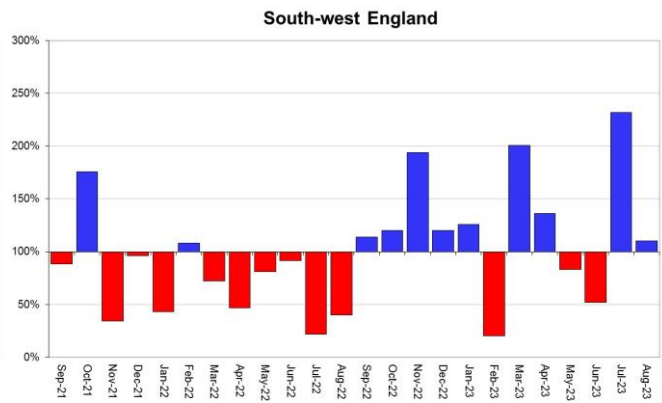
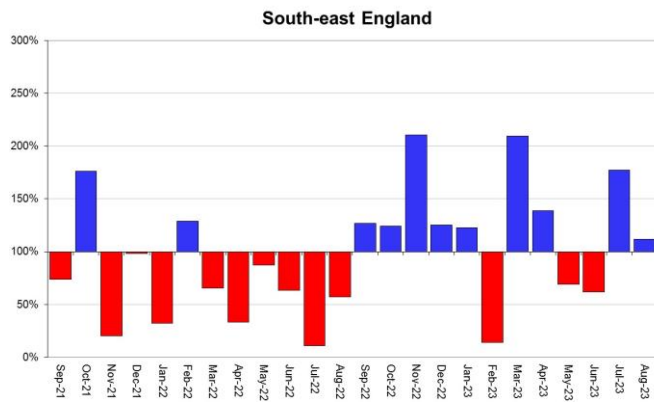


HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2023). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved. Environment Agency, 100024198, 2023.

## 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.





HadUK rainfall data. (Source: Met Office. Crown copyright, 2023).

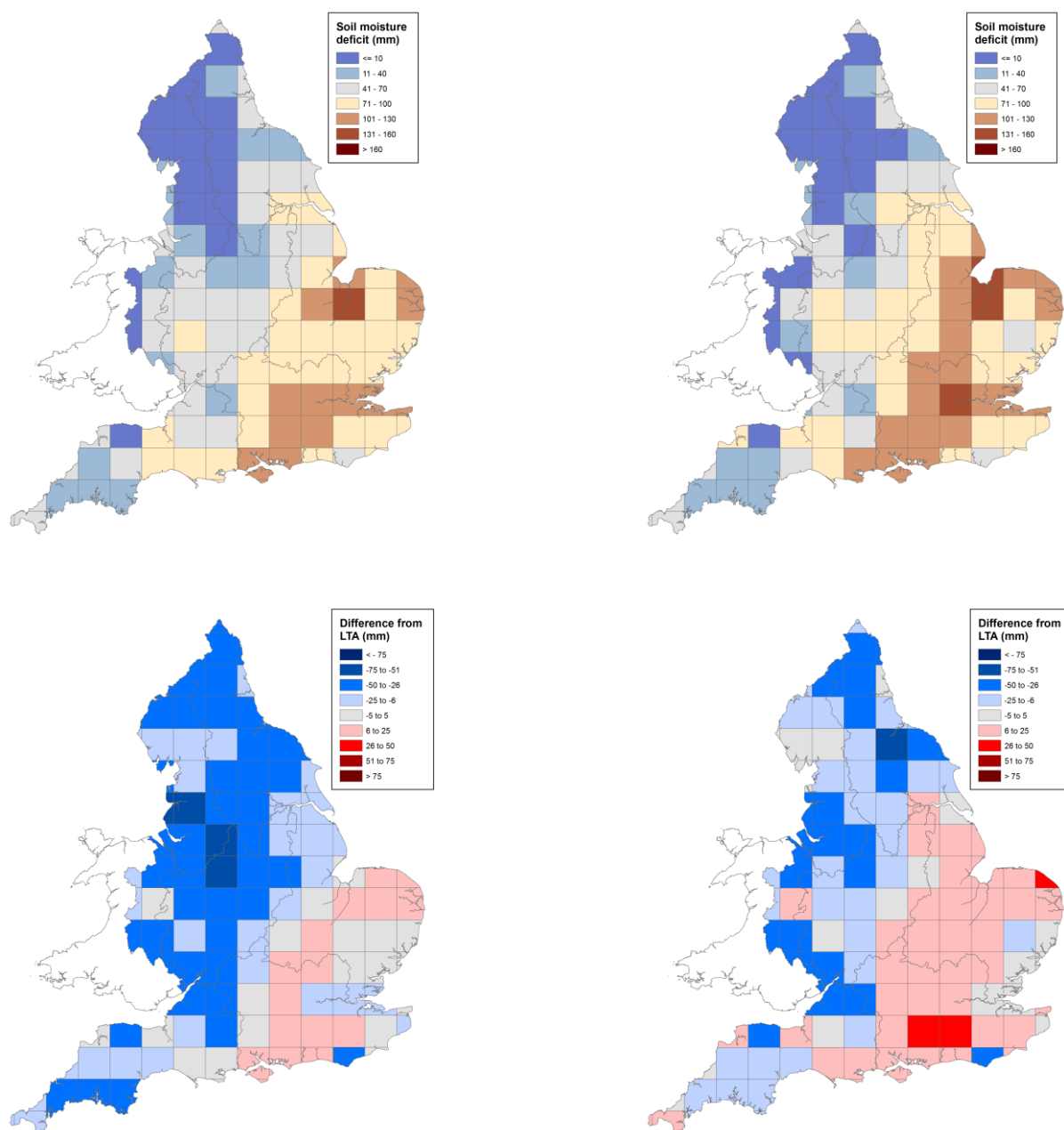
## 3 Soil moisture deficit

### 3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending, 02 August 2023 (left panel) and 30 August 2023 (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 July 2023

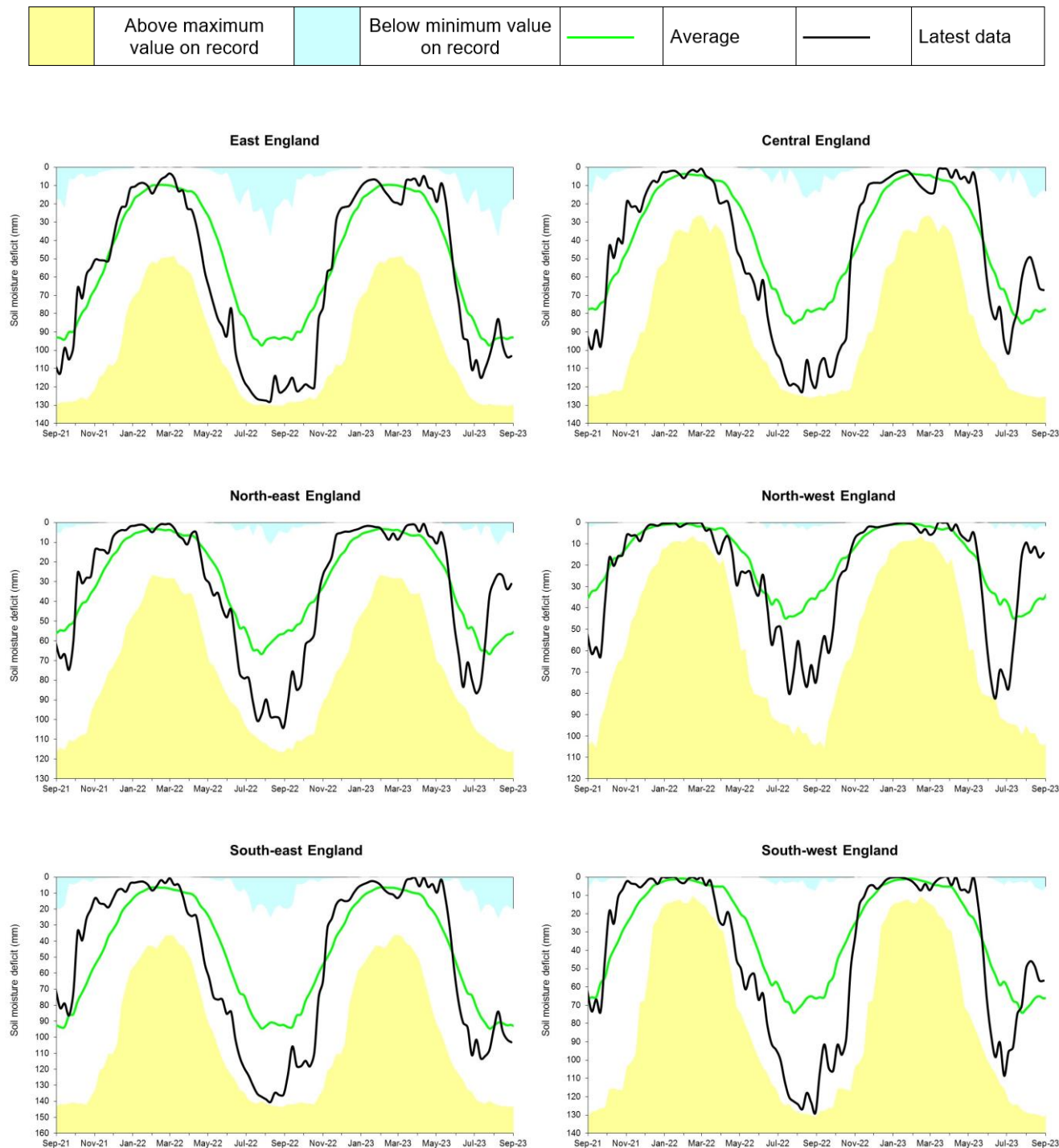
End of August 2023



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Environment Agency, 100024198, 2023.

## 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.



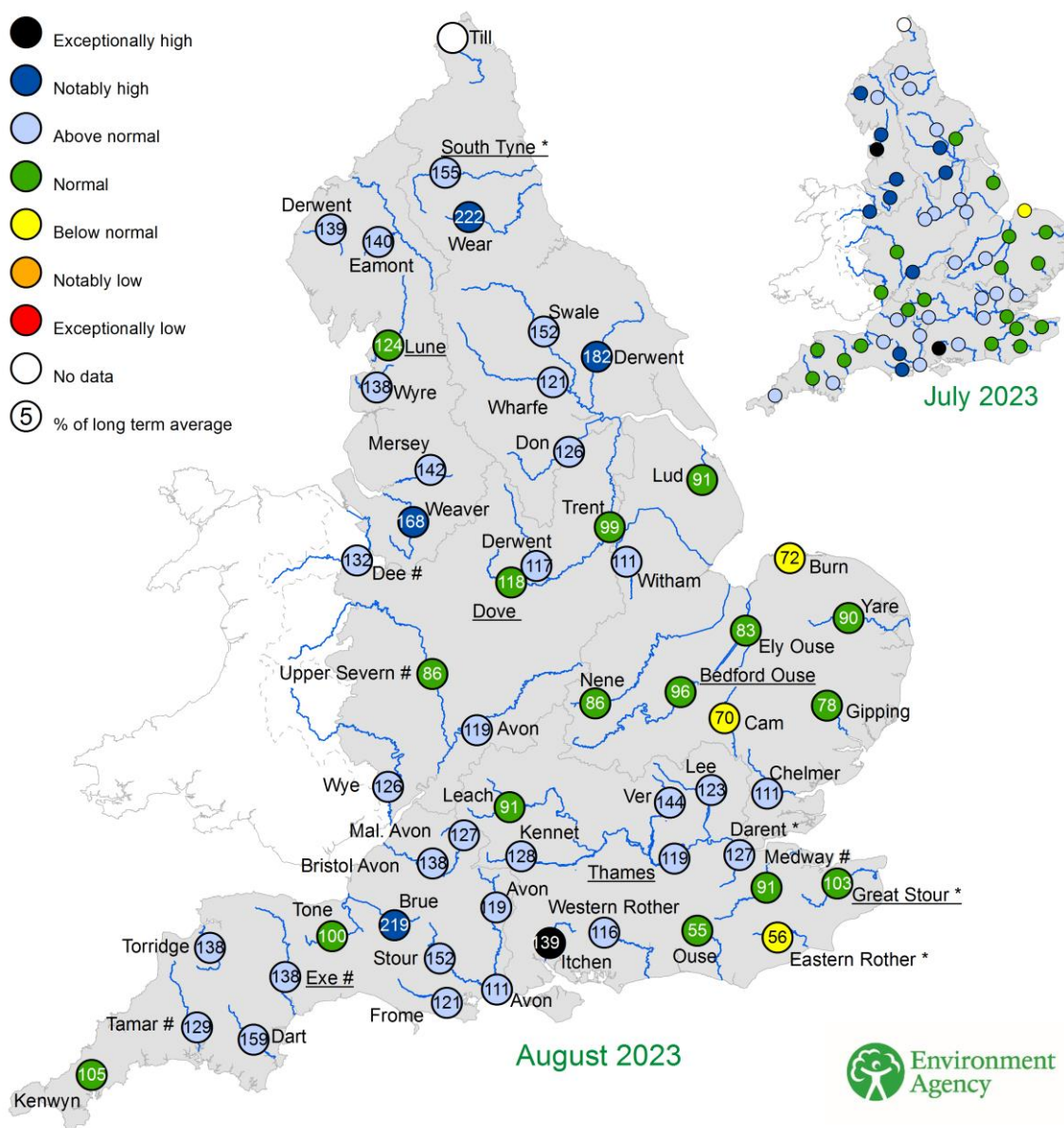
(Source: Met Office. Crown copyright, 2023).

## 4 River flows

### 4.1 River flow map

Figure 4.1: Monthly mean river flow for indicator sites for July 2023 and August 2023, expressed as a percentage of the respective long term average and classed relative to an analysis of historic July and August monthly means. Table available in the appendices with detailed information. Regional index sites are underlined and shown in the hydrographs in Figure 4.2.

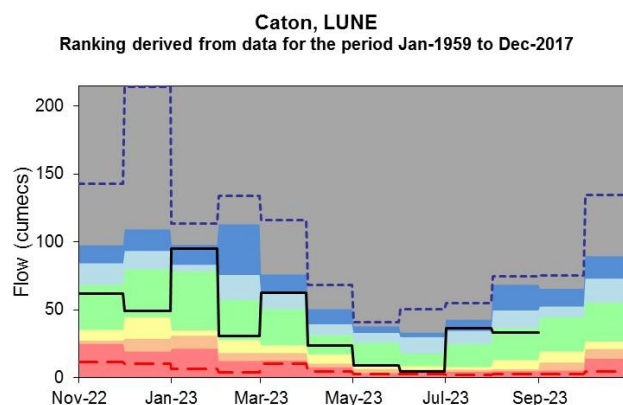
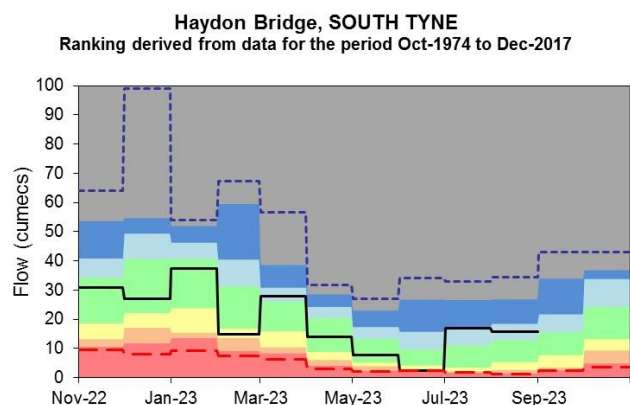
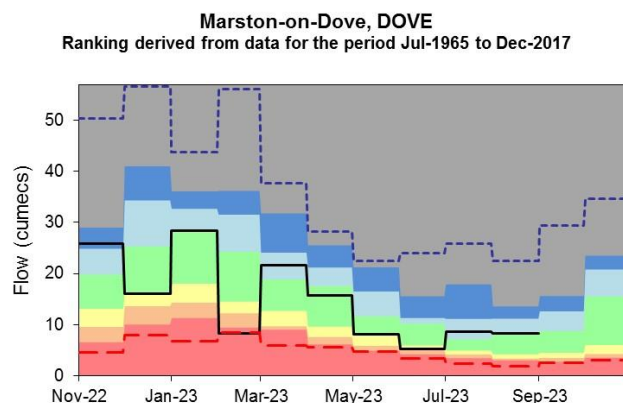
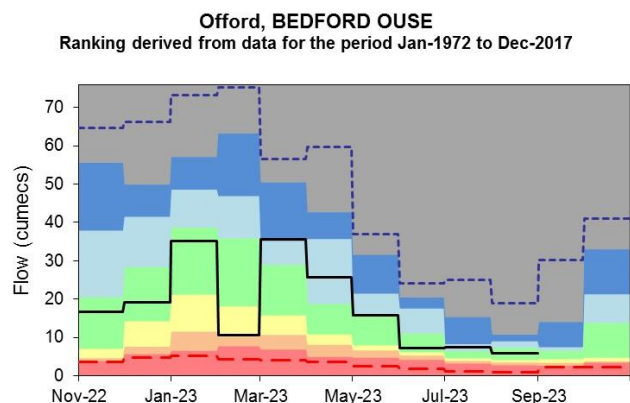
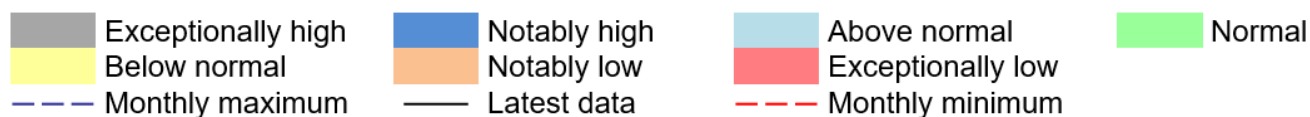
Naturalised flows are provided for the River Thames and the River Lee. +/- Monthly mean flow is the highest/lowest on record for the current month (note that record length varies between sites). \* Flows may be overestimated at these sites – data should be treated with caution. # Flows may be impacted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

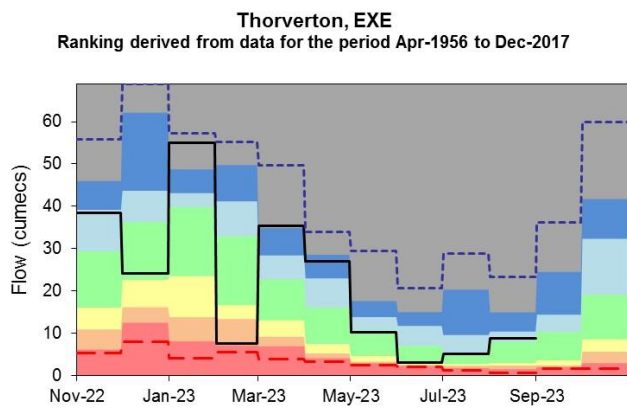
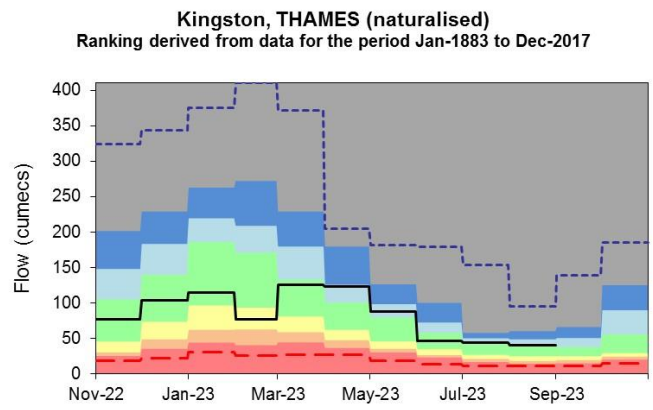
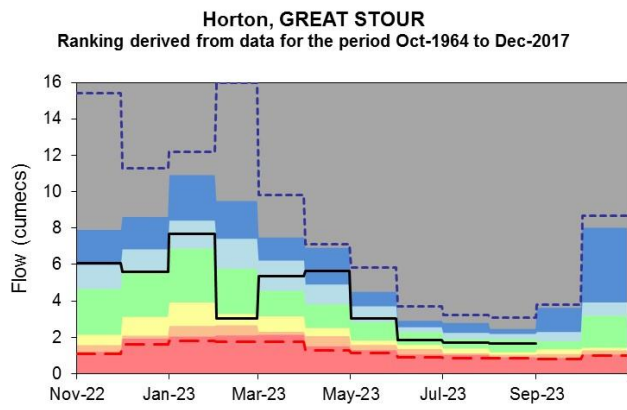


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## 4.2 River flow charts

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.





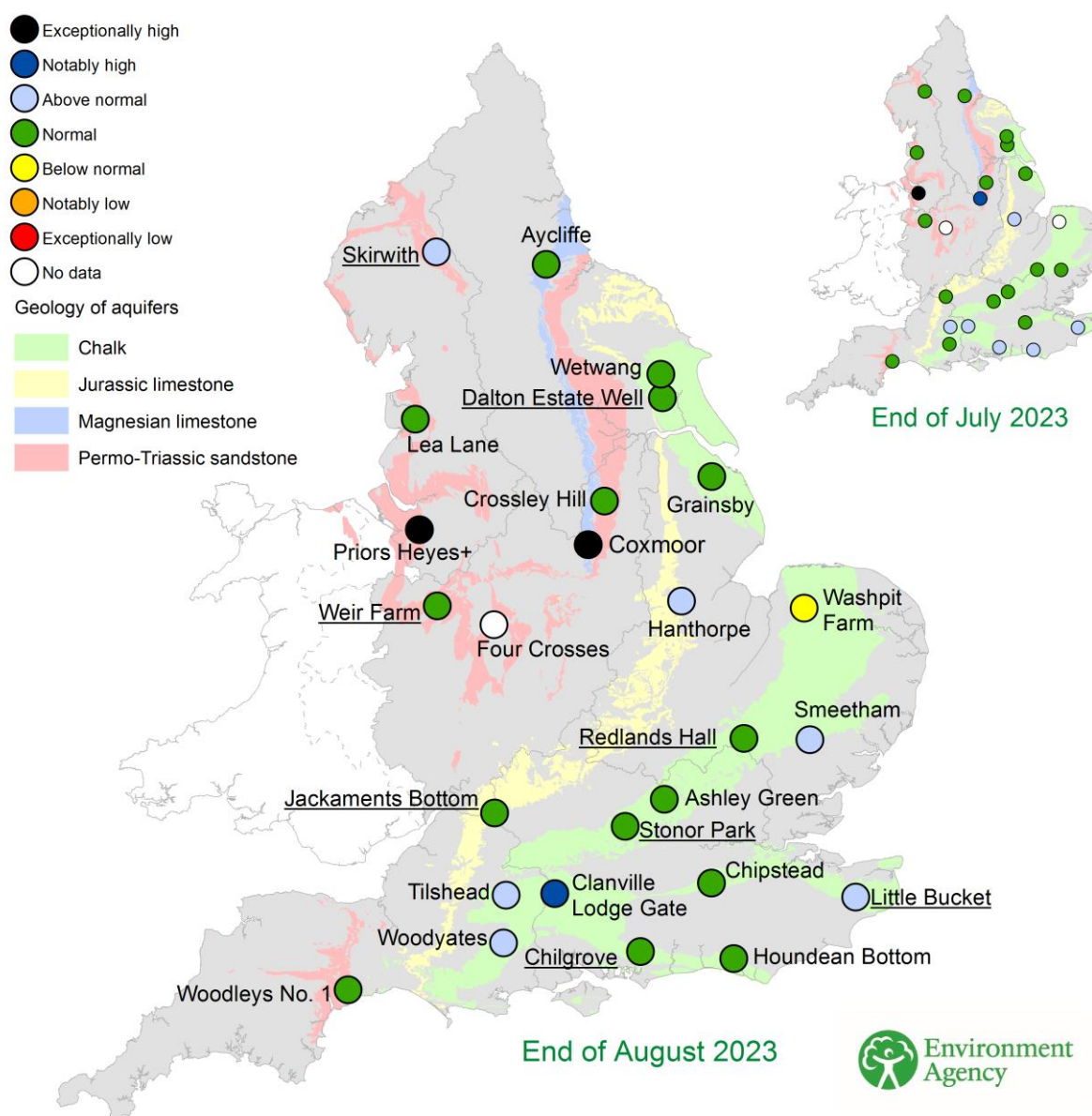
(Source: Environment Agency).

## 5 Groundwater levels

### 5.1 Groundwater levels map

Figure 5.1: Groundwater levels for indicator sites at the end of July 2023 and August 2023, classed relative to an analysis of respective historic July and August levels. Major aquifer index sites are underlined and shown in groundwater level charts in Figure 5.2.

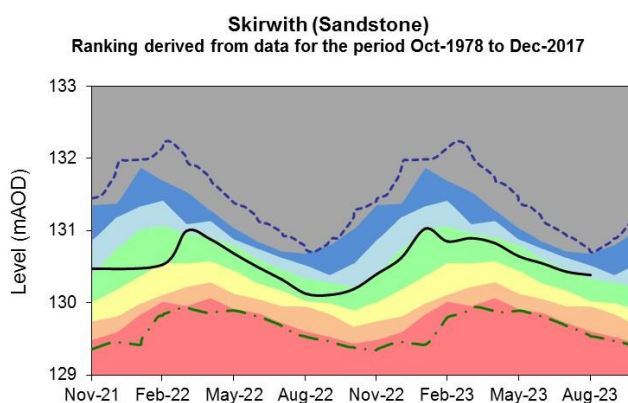
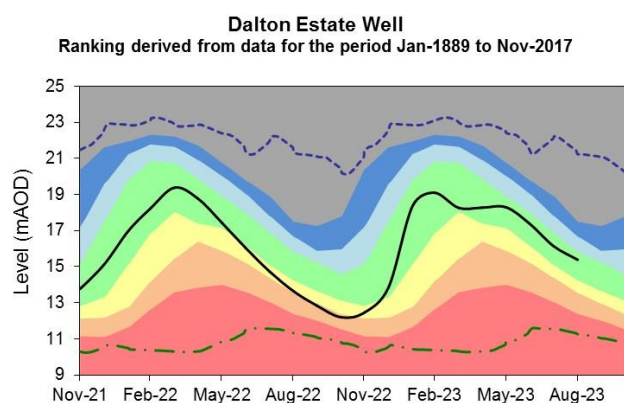
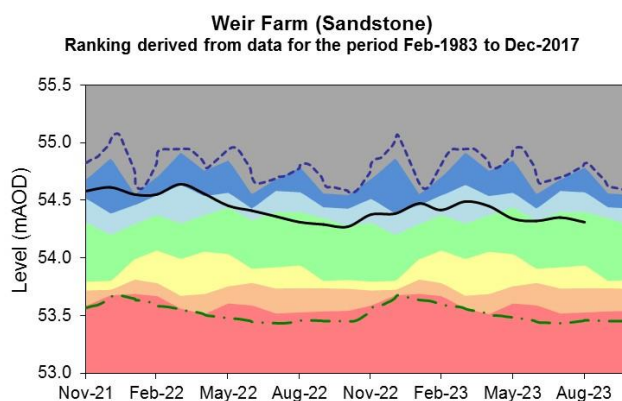
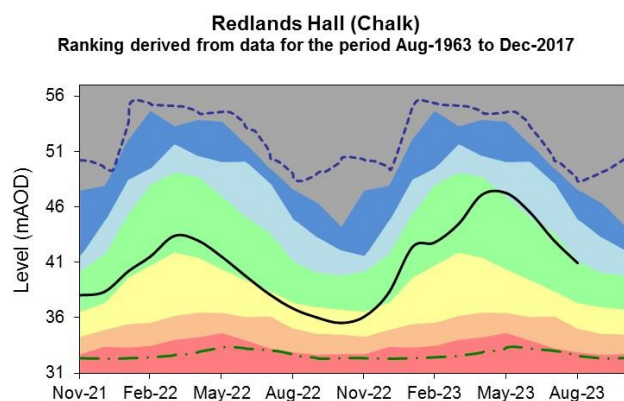
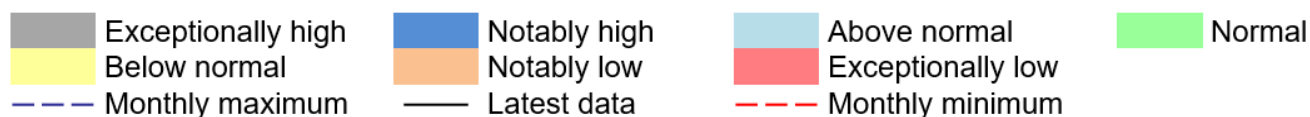
Redlands Hall and Aycliffe are manually dipped at different times during the month and so may not be fully representative of month end levels. Levels at Priors Heyes remain high compared to historic levels because the aquifer is recovering from the effects of historic abstraction. +/- End of month groundwater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

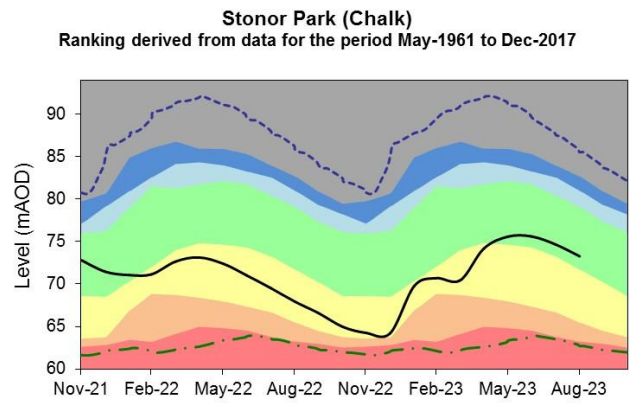
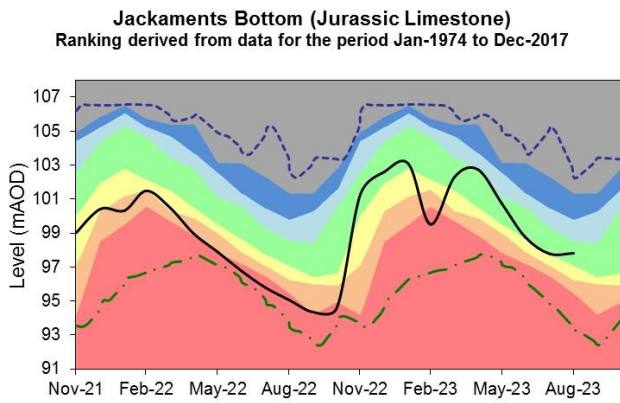
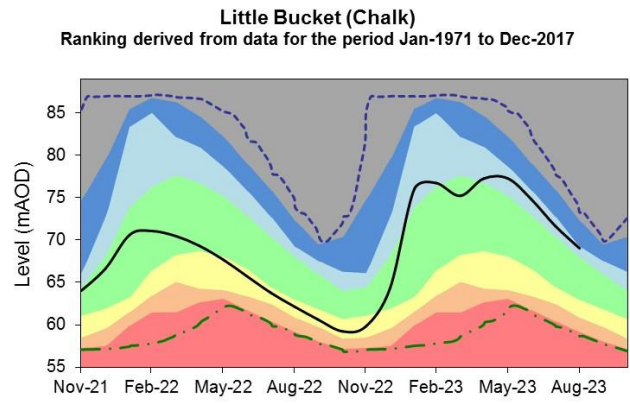
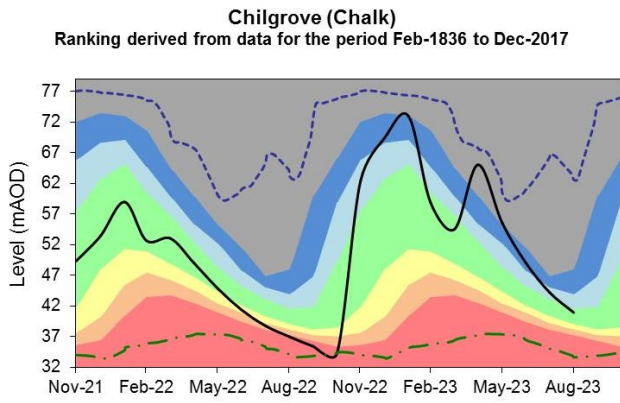


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## 5.2 Groundwater level charts

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.



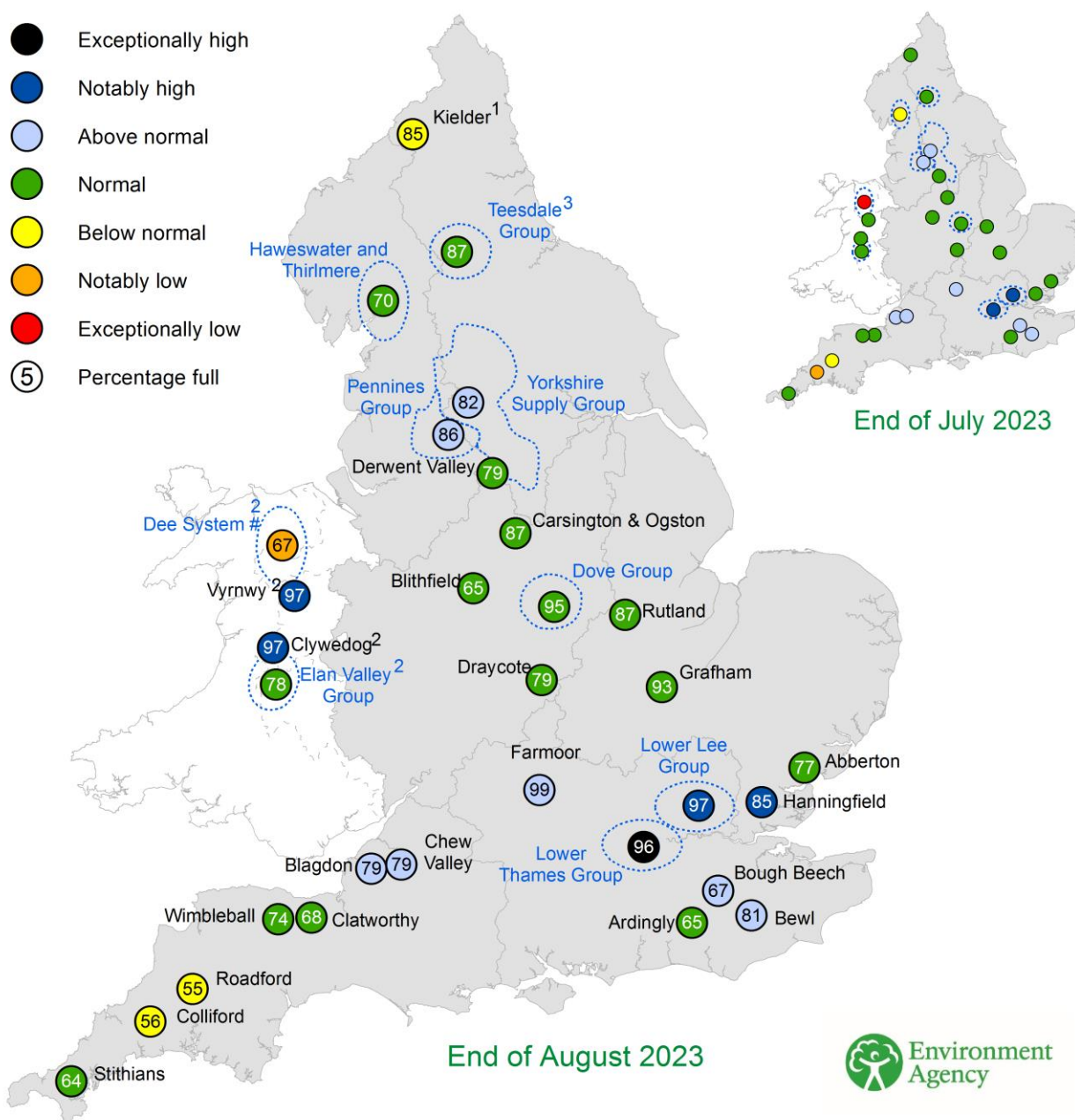


(Source: Environment Agency, 2023)

## 6 Reservoir storage

### 6.1 Reservoir storage map

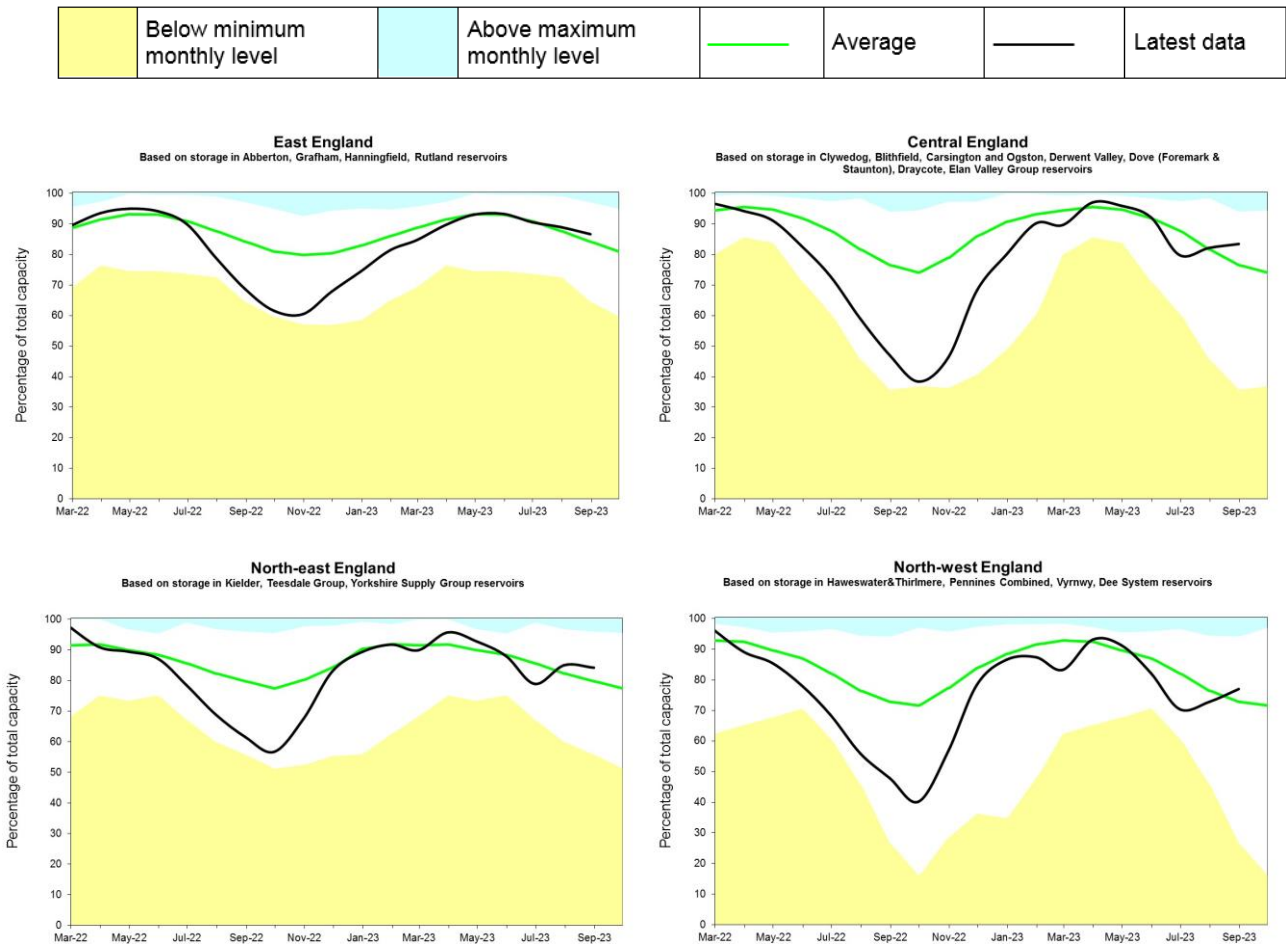
Figure 6.1: Reservoir stocks at key individual and groups of reservoirs at the end of July 2023 and August 2023 as a percentage of total capacity and classed relative to an analysis of historic July and August values respectively. Note: Classes shown may not necessarily relate to control curves or triggers 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.

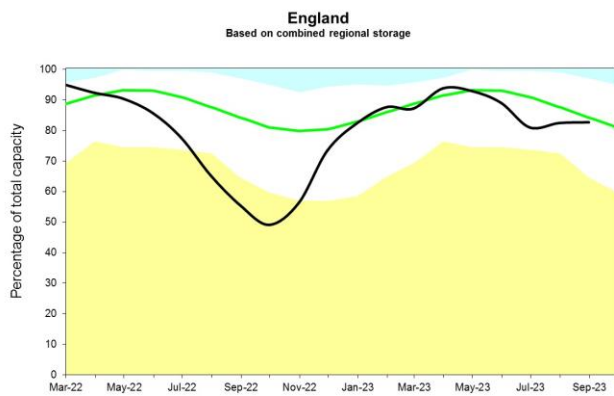
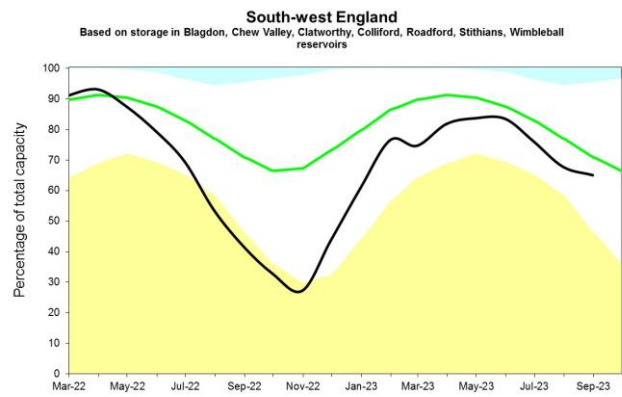
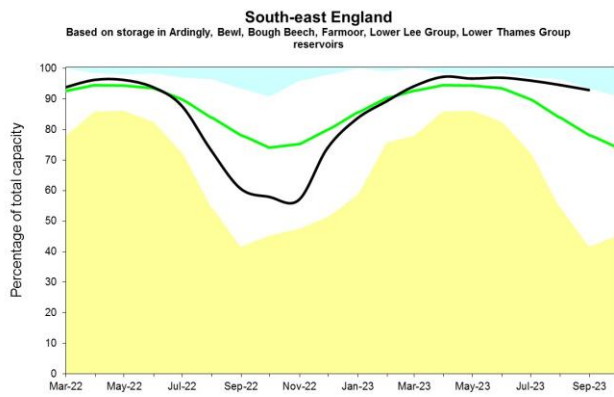


(Source: water companies). Crown copyright. All rights reserved. Environment Agency, 100024198, 2023

## 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.





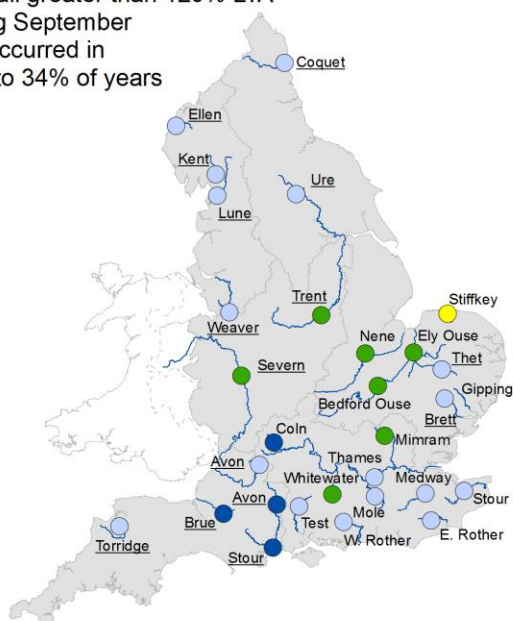
(Source: Water Companies).

## 7 Forward look

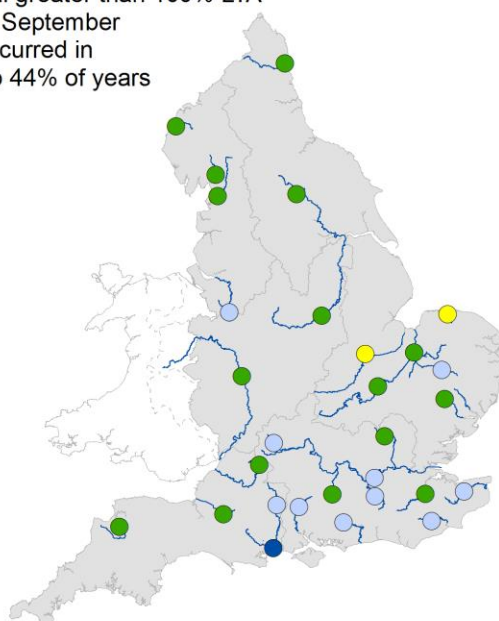
### 7.1 River flow

Figure 7.1: Projected river flows at key indicator sites up until the end of September 2023. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall during September 2023. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by CEH.

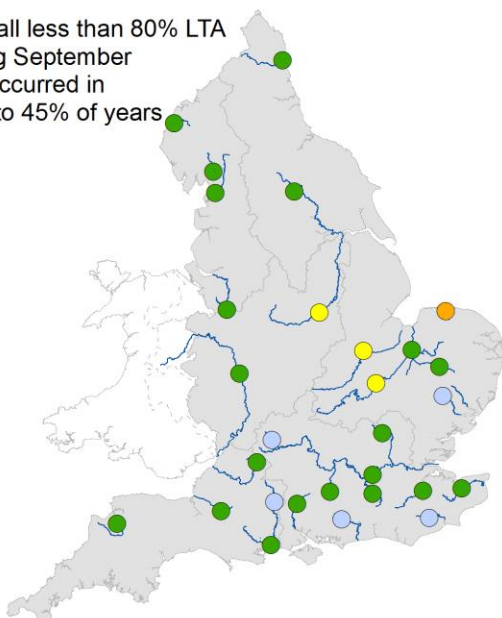
Rainfall greater than 120% LTA during September has occurred in 26% to 34% of years



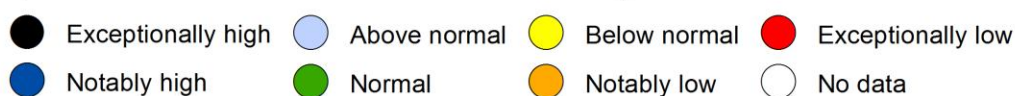
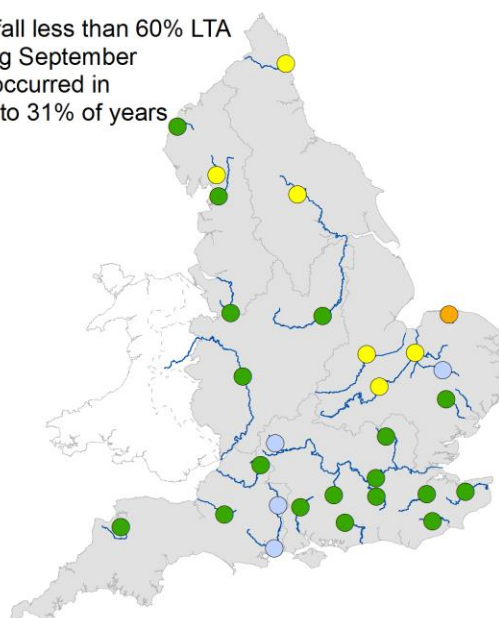
Rainfall greater than 100% LTA during September has occurred in 37% to 44% of years



Rainfall less than 80% LTA during September has occurred in 38% to 45% of years



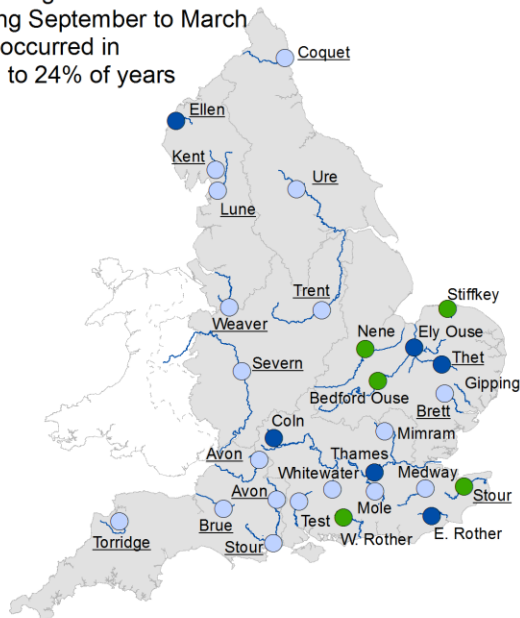
Rainfall less than 60% LTA during September has occurred in 24% to 31% of years



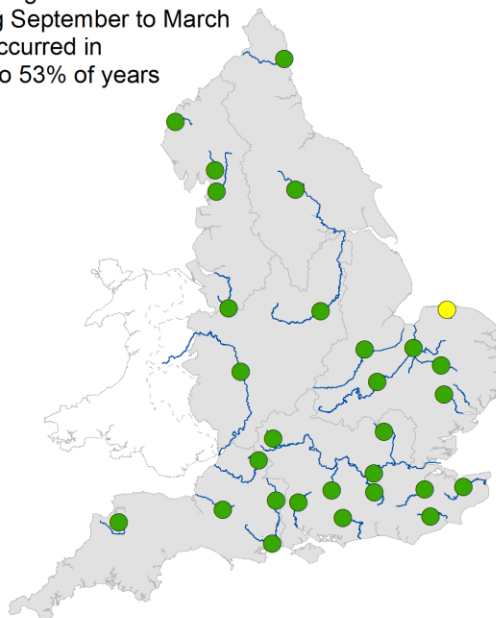
(Source: UK Centre for Ecology and Hydrology, Environment Agency).

Figure 7.2: Projected river flows at key indicator sites up until the end of March 2024. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall between September 2023 and March 2024. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by CEH.

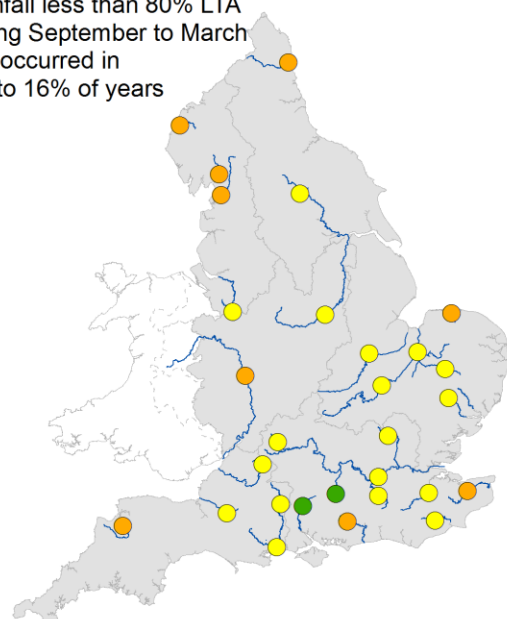
Rainfall greater than 120% LTA during September to March has occurred in 11% to 24% of years



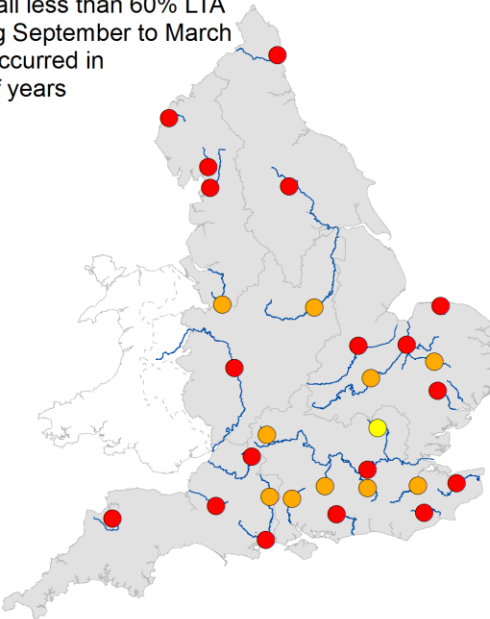
Rainfall greater than 100% LTA during September to March has occurred in 48% to 53% of years



Rainfall less than 80% LTA during September to March has occurred in 7% to 16% of years

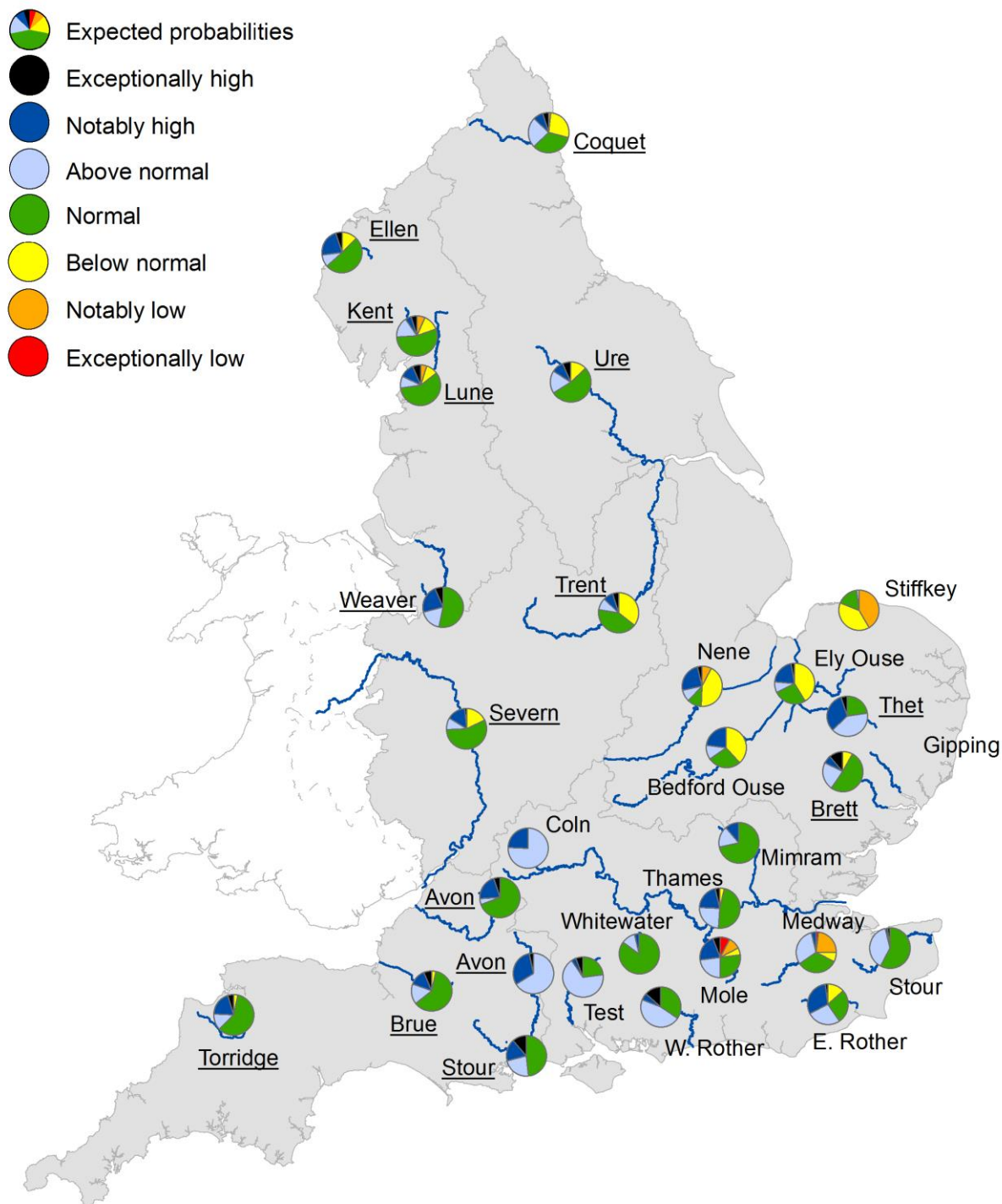


Rainfall less than 60% LTA during September to March has occurred in 0% of years



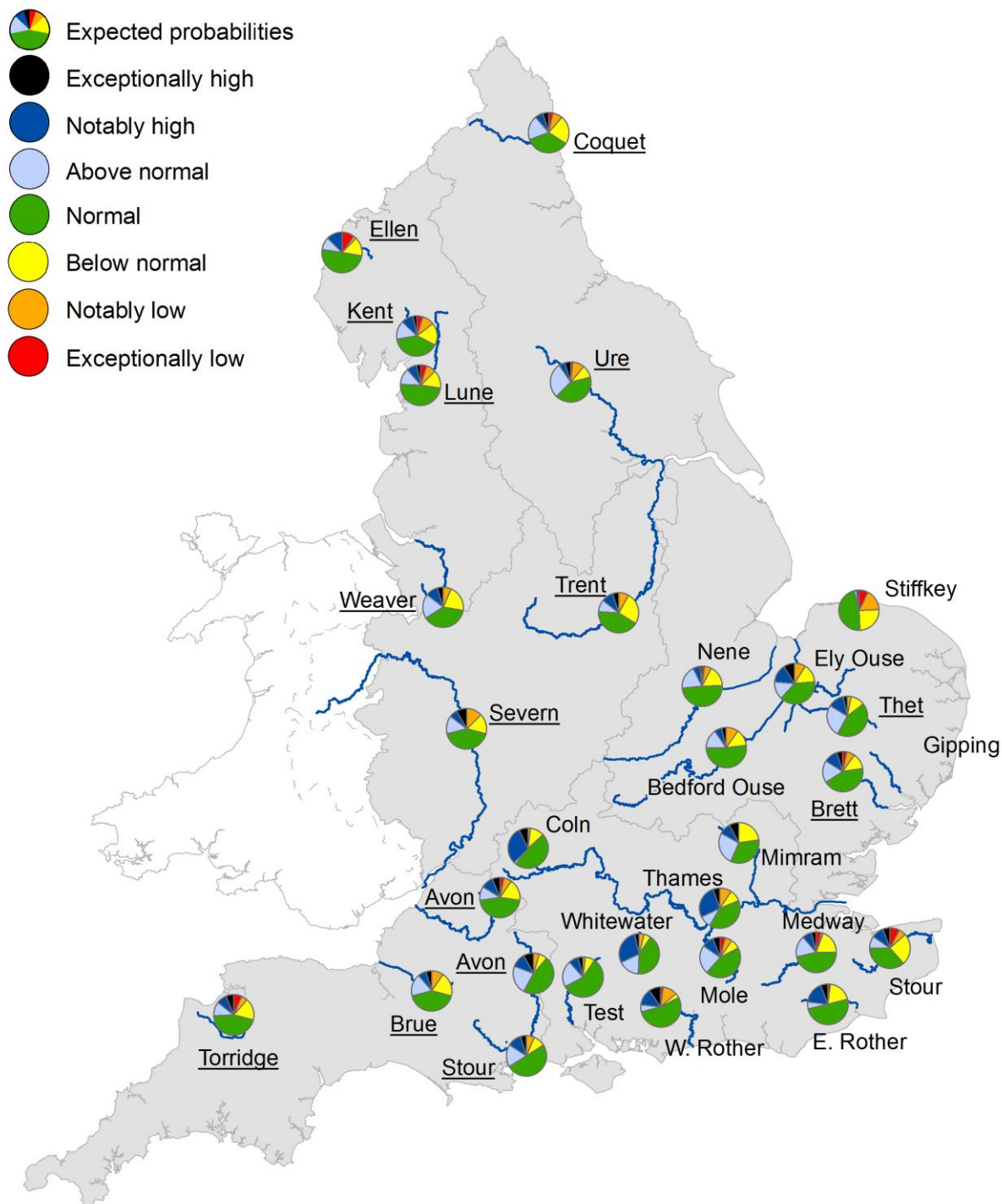
(Source: UK Centre for Ecology and Hydrology, Environment Agency)

Figure 7.3: Probabilistic ensemble projections of river flows at key indicator sites up until the end of September 2023. 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 March 2024. 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

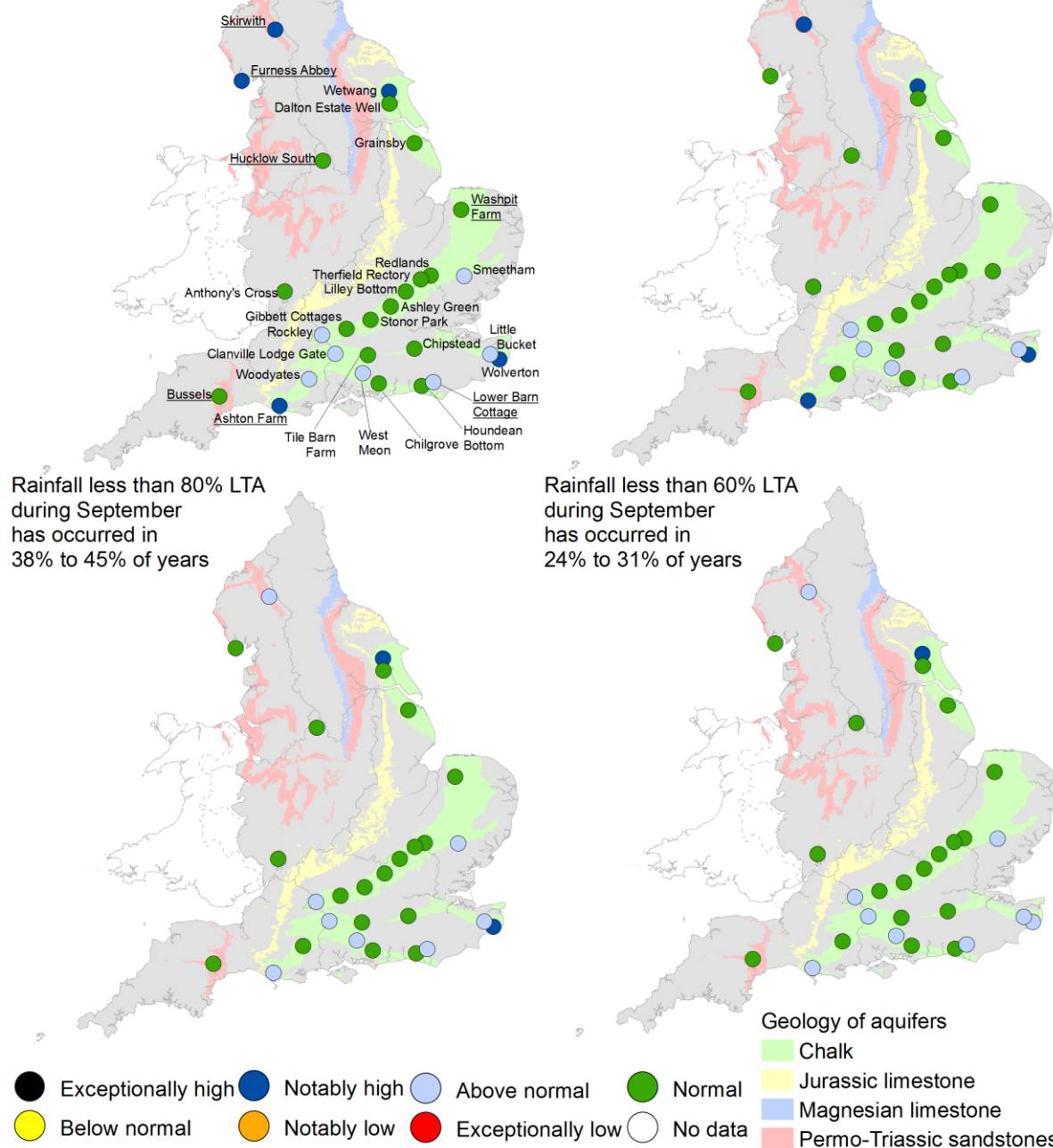
Figure 7.5: Projected groundwater levels at key indicator sites at the end of September 2023. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average during September 2023. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by BGS.

Rainfall greater than 120% LTA during September has occurred in 26% to 34% of years

Rainfall greater than 100% LTA during September has occurred in 37% to 44% of years

Rainfall less than 80% LTA during September has occurred in 38% to 45% of years

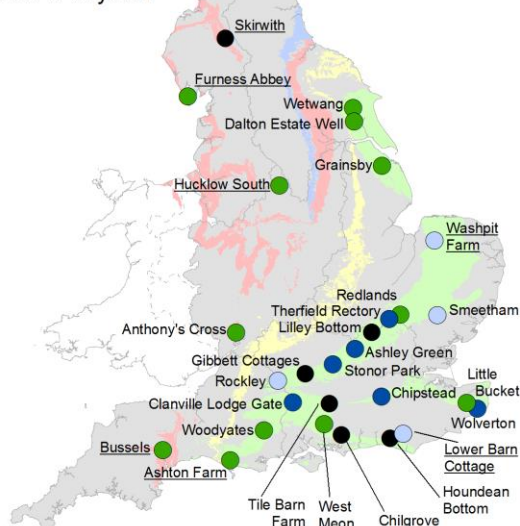
Rainfall less than 60% LTA during September has occurred in 24% to 31% of years



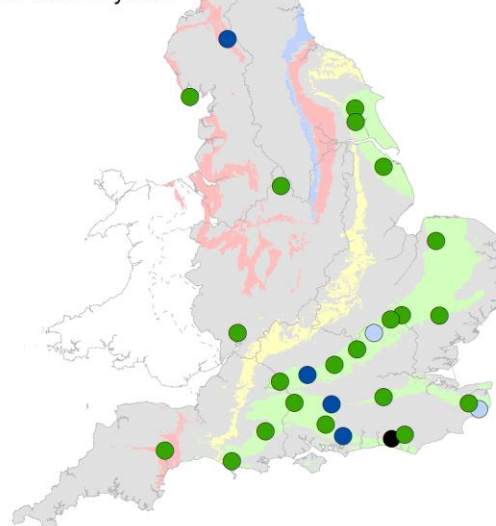
(Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum BGS © NERC. Crown copyright all rights reserved. Environment Agency 100024198, 2023.

Figure 7.6: Projected groundwater levels at key indicator sites at the end of March 2024. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall between September 2023 and March 2024. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by BGS.

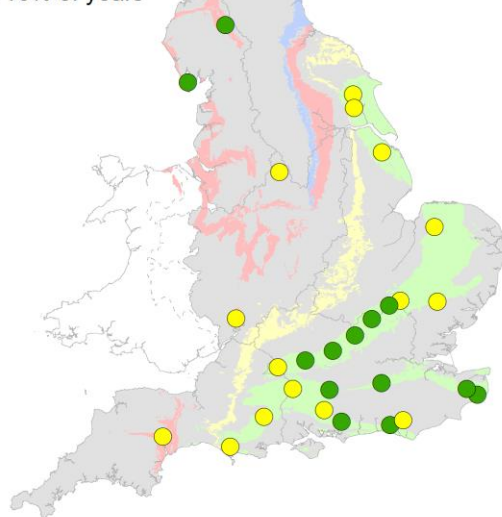
Rainfall greater than 120% LTA during September to March has occurred in 11% to 24% of years



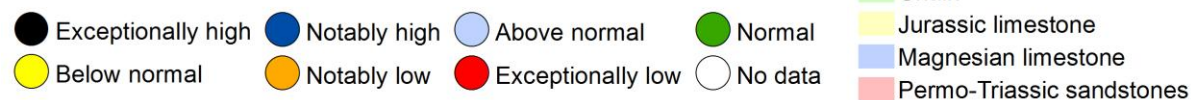
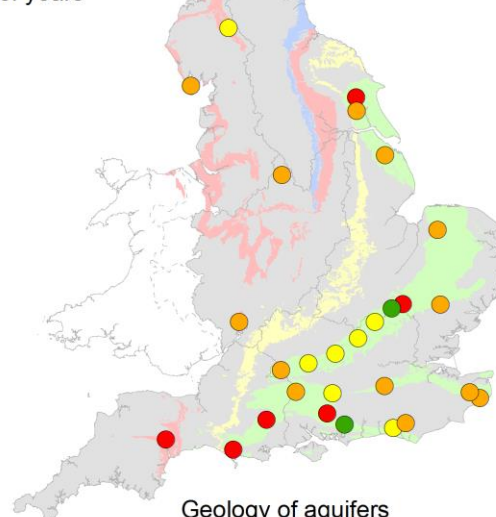
Rainfall greater than 100% LTA during September to March has occurred in 48% to 53% of years



Rainfall less than 80% LTA during September to March has occurred in 7% to 16% of years

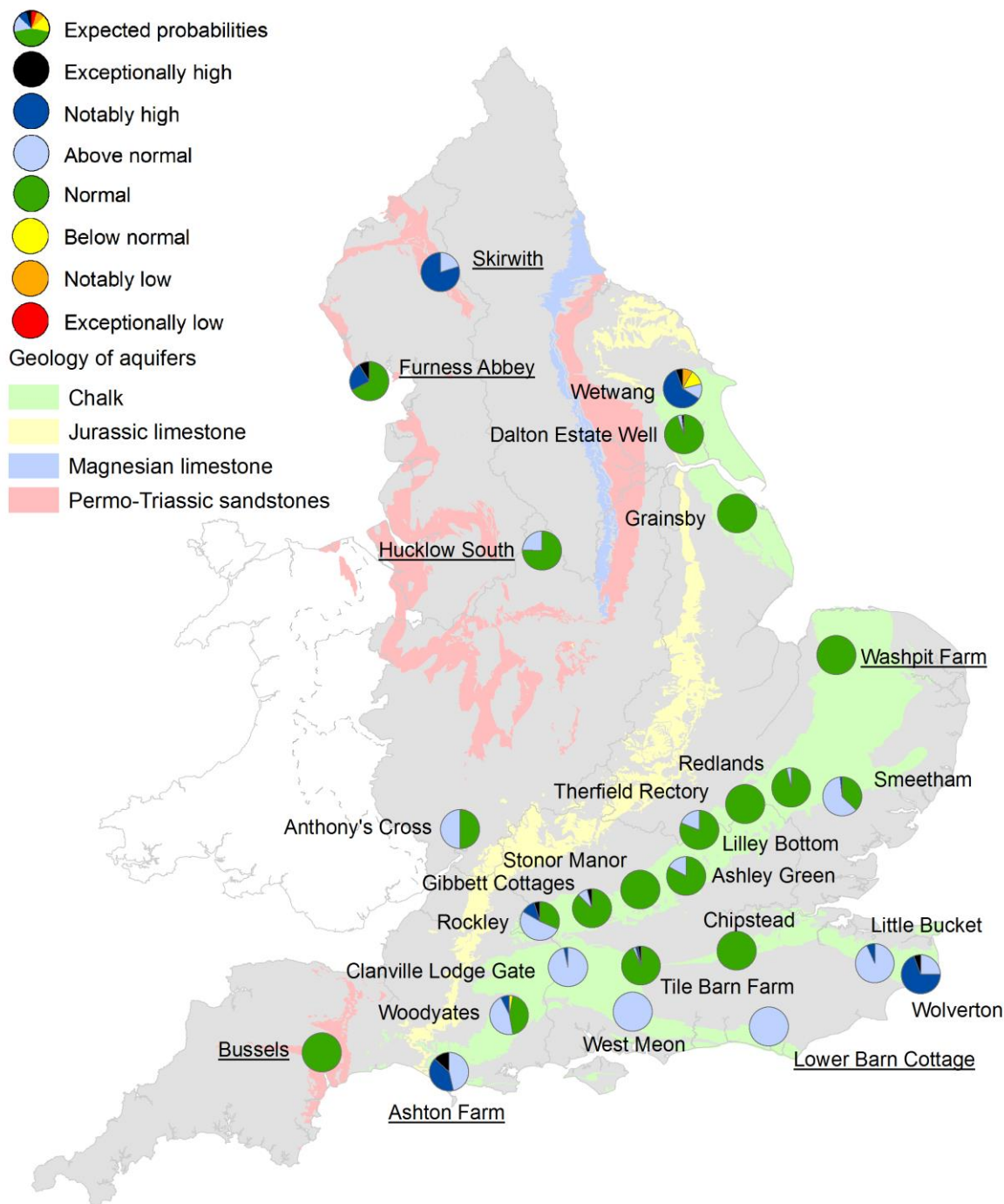


Rainfall less than 60% LTA during September to March has occurred in 0% of years



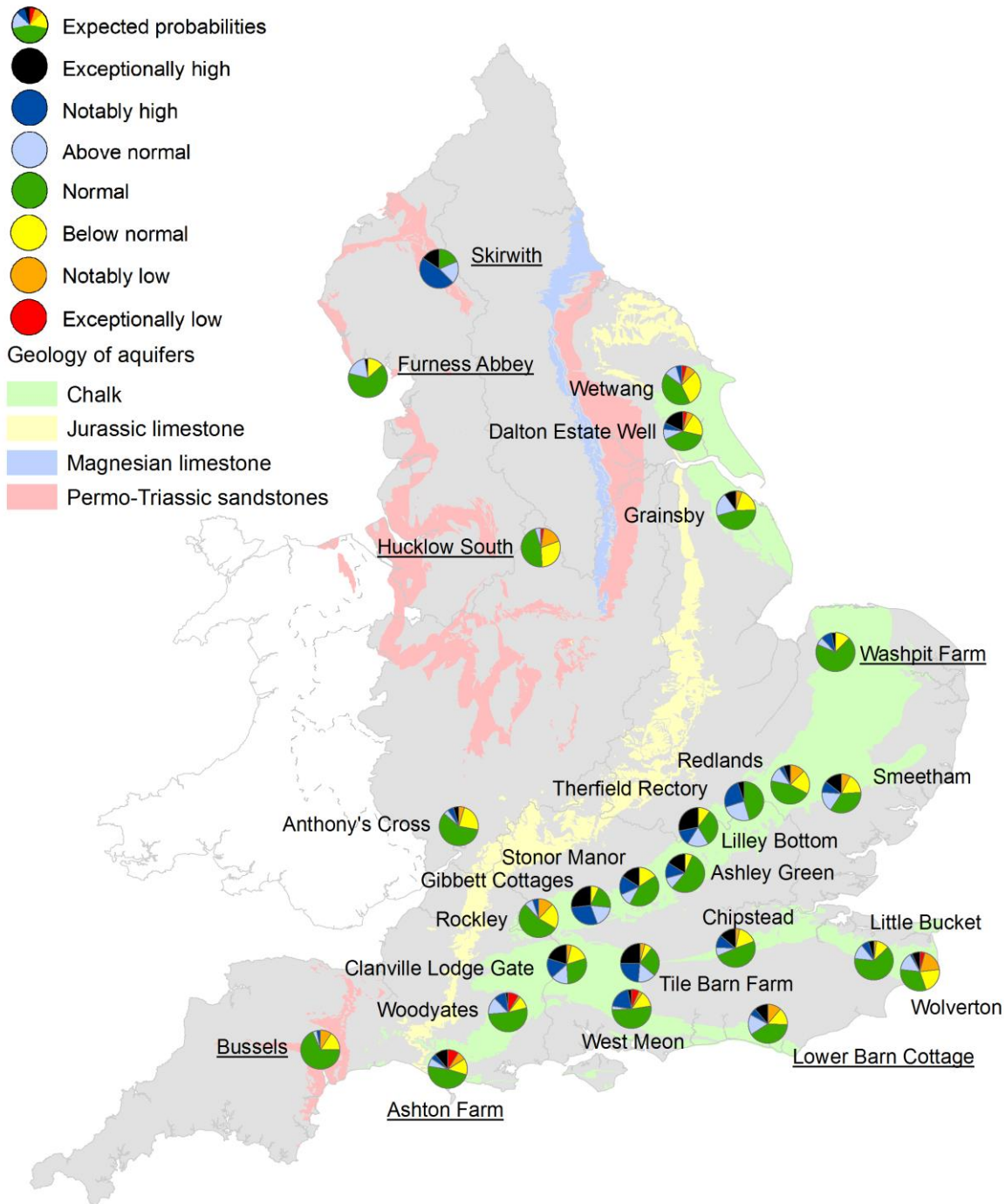
(Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum BGS © NERC Crown copyright. All rights reserved. Environment Agency 100024198 2023.

Figure 7.7: Probabilistic ensemble projections of groundwater levels at key indicator sites at the end of September 2023. 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.



(Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum, BGS © NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2023.

Figure 7.8: Probabilistic ensemble projections of groundwater levels at key indicator sites at the end of March 2024. 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 ( $\text{m}^3\text{s}^{-1}$  or  $\text{m}^3/\text{s}$ ).

#### **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	Aug 2023 rainfall % of long term average 1961 to 1990	Aug 2023 band	Jun 2023 to August 2023 cumulative band	Mar 2023 to August 2023 cumulative band	Sep 2022 to August 2023 cumulative band
East England	108	Normal	Normal	Above normal	Normal
Central England	112	Above Normal	Normal	Above normal	Above normal
North-east England	109	Normal	Above normal	Above normal	Normal
North-west England	116	Notably High	Notably high	Notably high	Notably high
South-east England	127	Notably High	Normal	Notably high	Notably high
South-west England	127	Notably High	Above normal	Exceptionally high	Notably high
England	117	Notably High	Normal	Notably high	Notably high

## 9.2 River flows table

Geographic area	Site name	River	Aug 2023 band	Jul 2023 band
East	Burnham	Burn	Below normal	Below normal
East	Claypole	Upper Witham	Above normal	Above normal
East	Colney	Yare	Normal	Normal
East	Denver	Ely Ouse	Normal	Normal
East	Dernford	Cam	Below normal	Normal
East	Louth Weir	Lud	Normal	Normal
East	Offord	Bedford Ouse	Normal	Above normal
East	Springfield	Chelmer	Above normal	Above normal
East	Stowmarket	Gipping	Normal	Normal
East	Upton Mill	Nene	Normal	Above normal
Central	Bewdley	Severn	Normal	Normal
Central	Derby St Marys	Derwent	Above normal	Above normal
Central	Evesham	Avon	Above normal	Notably high
Central	Marston-on-dove	Dove	Normal	Above normal
Central	North Muskham	Trent	Normal	Above normal
North East	Buttercrambe	Derwent	Notably high	Normal
North East	Crakehill Topcliffe	Swale	Above normal	Above normal

North East	Heaton Mill	Till	No data	No data
North East	Doncaster	Don	Above normal	Notably high
North East	Haydon Bridge	South Tyne	Above normal	Above normal
North East	Tadcaster	Wharfe	Above normal	Notably high
North East	Witton Park	Wear	Notably high	Above normal
North West	Ashton Weir	Mersey	Above normal	Notably high
North West	Caton	Lune	Normal	Notably high
North West	Ouse Bridge	Derwent	Above normal	Notably high
North West	Pooley Bridge	Eamont	Above normal	Above normal
North West	St Michaels	Wyre	Above normal	Exceptionally high
North West	Ashbrook	Weaver	Notably high	Notably high
South East	Allbrook and Highbridge	Itchen	Exceptionally high	Exceptionally high
South East	Feildes Weir	Lee	Above normal	Above normal
South East	Hansteads	Ver	Above normal	Above normal
South East	Hawley	Darent	Above normal	Normal
South East	Horton	Great Stour	Normal	Normal
South East	Kingston	Thames	Above normal	Above normal
South East	Lechlade	Leach	Normal	Normal
South East	Teston and Farleigh	Medway	Normal	Normal

South East	Marlborough	Kennet	Above normal	Above normal
South East	Udiam	Rother	Below normal	Normal
South East	Ardingley Gs	Ouse	Normal	Normal
South East	Princes Marsh Gs	Rother	Above normal	Above normal
South West	Amesbury	Upper Avon	Above normal	Above normal
South West	Bathford	Avon	Above normal	Above normal
South West	Bishops Tull	Tone	Normal	Normal
South West	East Stoke	Frome	Above normal	Notably high
South West	Great Somerford	Avon	Above normal	Normal
South West	Gunnislake	Tamar	Above normal	Normal
South West	Hammoon	Middle Stour	Above normal	Notably high
South West	Knapp Mill	Avon	Above normal	Above normal
South West	Lovington	Upper Brue	Notably high	Above normal
South West	Thorverton	Exe	Above normal	Normal
South West	Torrington	Torridge	Above normal	Normal
South West	Truro	Kenwyn	Normal	Above normal
South West	Austins Bridge	Dart	Above normal	Above normal
EA Wales	Manley Hall	Dee	Above normal	Notably high
EA Wales	Redbrook	Wye	Above normal	Normal

### 9.3 Groundwater table

Geographic area	Site name	Aquifer	End of Aug 2023 band	End of Jul 2023 band
East	Grainsby	Grimsby Ancholme Louth Chalk	Normal	Normal
East	Redlands Hall	Cam Chalk	Normal	Normal
East	Hanthorpe	Cornbrash (South)	Above normal	Above normal
East	Smeetham Hall Cott.	North Essex Chalk	Above normal	Normal
East	Washpit Farm Rougham	North West Norfolk Chalk	Below normal	No data
Central	Four Crosses	Grimsby Ancholme Louth Limestone	No data	No data
Central	Weir Farm	Bridgnorth Sandstone Formation	Normal	Normal
Central	Coxmoor	Permo Triassic Sandstone	Exceptionally high	Notably high
Central	Crossley Hill	Permo Triassic Sandstone	Normal	Normal
North East	Dalton Estate Well	Hull & East Riding Chalk	Normal	Normal
North East	Aycliffe Nra2	Skerne Magnesian Limestone	Normal	Normal
North East	Wetwang	Hull & East Riding Chalk	Normal	Normal

North West	Priors Heyes	West Cheshire Permo-Triassic Sandstone	Exceptionally high	Exceptionally high
North West	Skirwith	Carlisle Basin Permo-Triassic sandstone	Above normal	Normal
North West	Lea Lane	Fylde Permo-Triassic Sandstone	Normal	Normal
South East	Chilgrove	Chichester-Worthing-Portsdown Chalk	Normal	Above normal
South East	Clanville Gate Gwl	River Test Chalk	Notably high	Above normal
South East	Houndean Bottom Gwl	Brighton Chalk Block	Normal	Above normal
South East	Little Bucket	East Kent Chalk - Stour	Above normal	Above normal
South East	Jackaments Bottom	Burford Oolitic Limestone (Inferior)	Normal	Normal
South East	Ashley Green Stw Obh	Mid-Chilterns Chalk	Normal	Normal
South East	Stonor Park	South-West Chilterns Chalk	Normal	Normal
South East	Chipstead Gwl	Epsom North Downs Chalk	Normal	Normal
South West	Tilshead	Upper Hampshire Avon Chalk	Above normal	Above normal
South West	Woodleys No1	Otterton Sandstone Formation	Normal	Normal
South West	Woodyates	Dorset Stour Chalk	Above normal	Normal

9.4    Reservoir table

Geographic region	% Full	Average comparison
East England	87	Above average
Central England	83	Above average
North-east England	84	Above average
North-west England	77	Above average
South-east England	93	Above average
South-west England	65	Below average
England	82	Below average