Monthly water situation report: England

1 Summary - July 2023

July was a very wet month, the wettest July in England since 2009, with all catchments receiving above average rainfall and the north-west recording the wettest July on record, using data from 1891. Soil moisture deficits decreased across England, with soils across much of the country wetter than would be expected for the end of July. River flows were above normal or higher at more than half of reported sites, particularly those in the north-west as they responded to the wet weather. By the end of July, groundwater levels had decreased at more than three-quarters as is expected at this time of year, and two-thirds of sites were classed as normal for the time of year. Reservoir stocks at the end of July were classed as normal at almost all reservoirs or reservoir groups we report on.

1.1 Rainfall

The July rainfall total for England was 120mm which represents 207% of the 1961 to 1990 long term average (LTA) for July (181% of the 1991 to 2020 LTA). For north-west England it was the wettest July on record (using records since 1891), and for England as a whole it was the sixth wettest (using records since 1891) and the wettest since July 2009. All catchments in England received above average rainfall during July, with two thirds receiving more than double the average amount of rainfall. Six catchments recorded their wettest July on record, including the Douglas catchment in Lancashire in north-west England which received 314% of LTA rainfall, making it the wettest hydrological area. The driest hydrological area was North West Grain in Kent in south-east England which received 119% of the LTA rainfall for the time of year. (Figure 2.1)

After such a wet month, July rainfall totals were classed as normal for the time of year for just fifteen catchments in England which was only in 11% of the total number. The remaining catchments were all classed as above normal or higher, with the majority being notably high for the time of year. At a regional scale, south-east and east England were above normal for the time of year, while central England was notably high. North-west, north-east and south-west England all received exceptionally high rainfall during July. Across England as a whole, rainfall in July was exceptionally high for the time of year. (Figure 2.2)

With two drier than average months being followed by a much wetter July, the 3 month cumulative rainfall totals reflect a mixed period for England. Much of the country saw normal rainfall totals over the 3 month period. In contrast Kent saw below normal rainfall totals for the 3 months. The north-west received above normal or higher rainfall totals, and parts of north-east, central and south-west England also saw above normal rainfall totals. The 6 month cumulative rainfall totals show the majority of the country received above normal or higher rainfall. The south-east, Welsh borders and north-east received normal rainfall. Twelve month cumulative rainfall totals show a similar pattern, although much of the south coast saw exceptionally high rainfall totals. (Figure 2.3)

1.2 Soil moisture deficit

Soil moisture deficits (SMD) decreased across England by the end of July following the above average rainfall received during the month. In the south-east and east SMDs reduced slightly from their higher levels at the end of June. Meanwhile, in the south-west, central, north-west and north-east deficits were reduced significantly by the rainfall throughout the month, with some areas having little to no deficit at the end of July. (Figure 3.1)

At the end of July SMD values in the south-east and east remained around or only slightly larger than average for the time of year, meaning soils were as dry as expected for the time of year. In contrast the SMDs in south-west, central, north-west and north-east England were smaller than average, with wetter soils than would be expected for the time of year, marking a rapid change since the end of June when all soils were drier than average. (Figure 3.2)

1.3 River flows

Monthly mean river flows increased at more than half of the indicator sites we report on. More than half of sites were above normal or higher for the time of year, with the remaining sites recording normal monthly mean river flows for July. Just one site was below normal, the River Burn at Burnham which has now remained below normal since October 2022. All sites in the north-west were above normal or higher for the time of year. (Figure 4.1)

Monthly mean river flows increased at all except two regional index sites in July. The naturalised flows on the River Thames at Kingston and gauged flows on the Great Stour at Horton both saw a small decrease in flows, leaving them above normal and normal respectively. The most notable increases in monthly mean river flows were recorded at Caton on the River Lune in the north-west, Haydon Bridge on the South Tyne in the north-east and Marston-on-Dove on the River Dove in central England. All three of these sites had above normal or notably high flows in July having been below normal or lower in June. (Figure 4.2)

1.4 Groundwater levels

By the end of July, groundwater levels had decreased at more than three-quarters of reported indicator sites compared to the end of June, as is expected at this time of year. Two-thirds of sites were classed as normal for the time of year, and all remaining sites were classed as above normal or higher. (Figure 5.1)

All except two major aquifer index sites were classed as normal at the end of July. The only exceptions were both in the south-east, Chilgrove in the Chichester Chalk and Little Bucket in the East Kent Stour Chalk, which were both above normal for the time of year. Redlands Hall in the Cam and Ely Ouse Chalk was the only site classed as normal to have changed band since June, having changed from above normal levels. (Figure 5.2)

1.5 Reservoir storage

Reservoir storage during July decreased at two-thirds of the reservoirs or reservoir groups that we report upon. The largest storage changes occurred at Clatworthy, Stithians and Wimbleball

in the south-west and Ardingly in the south-east with all four seeing a decrease of more than 10%. The biggest increase was seen in the Pennines Group where levels rose by 17%. These changes in storage resulted in almost all reservoirs or reservoir groups being classed as normal or higher for the time of year. Storage at four reservoirs was classed as below normal or lower. (Figure 6.1)

At a regional scale total reservoir storage increased during July in the north-east, north-west and central England, while all other regions saw levels decline. England as a whole saw levels remain around the same as at the end of June. Total reservoir storage ranged from 68% in the south-west to 95% in south-east England. By the end of July the total reservoir storage for England was 82%. (Figure 6.2)

1.6 Forward look

Although average rainfall is forecast, the mid-August period is likely to experience unsettled conditions with scattered showers across the country, north-west England is expected to experience heavier and more frequent showers than the south-east. Conditions are likely to remain changeable for the rest of August with occasional bands of rain and showers most likely.

For the UK for the 3 month period from August to October there is a higher chance than usual for warmer weather although near average temperatures are most likely. The chances 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, 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 shows 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 in south-west and south-east England has a greater likelihood of experiencing above normal or higher levels. Groundwater levels are most likely to be in their expected range across the rest of England. By the end of March 2024, groundwater levels throughout England are expected to be normal. With sites located along the east coast more likely to experience below normal levels, whereas sites supported by the Chalk aquifer in south and east 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.

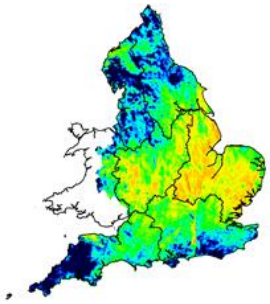
Author: National Water Resources Hydrology Team, Nationalhydrology@environment-agency.gov.uk

2 Rainfall

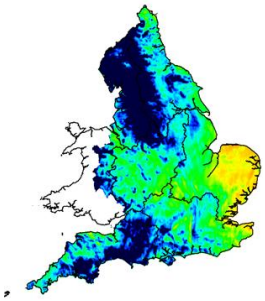
2.1 Rainfall map

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.

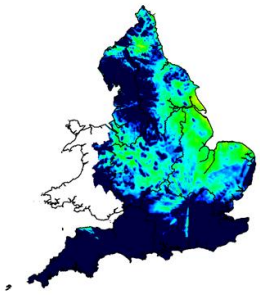
September 2022



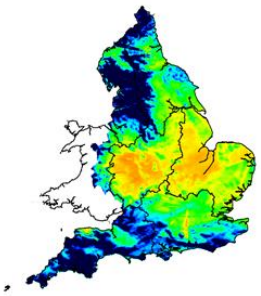
October 2022



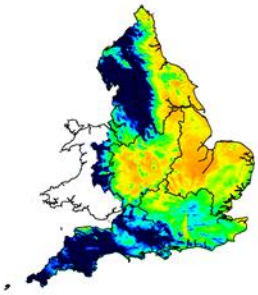
November 2022



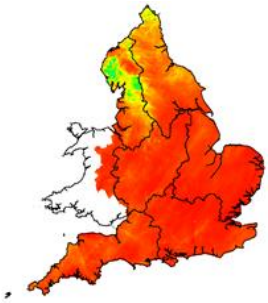
December 2022



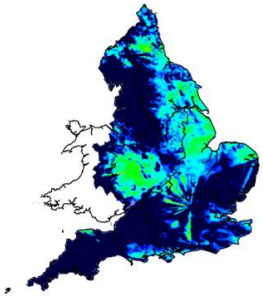
January 2023



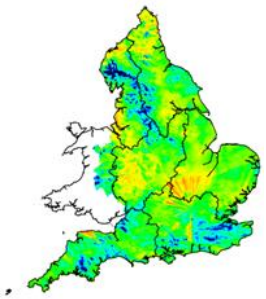
February 2023



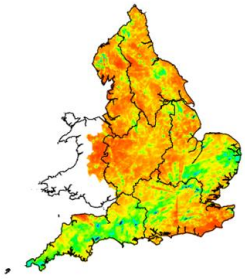
March 2023



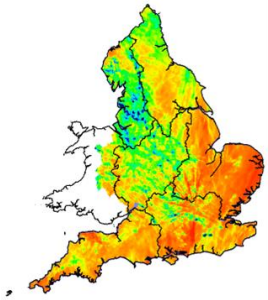
April 2023



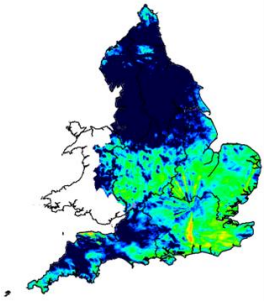
May 2023



June 2023



July 2023



Map Legend

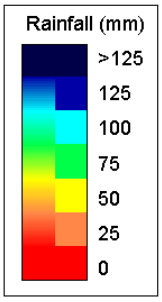
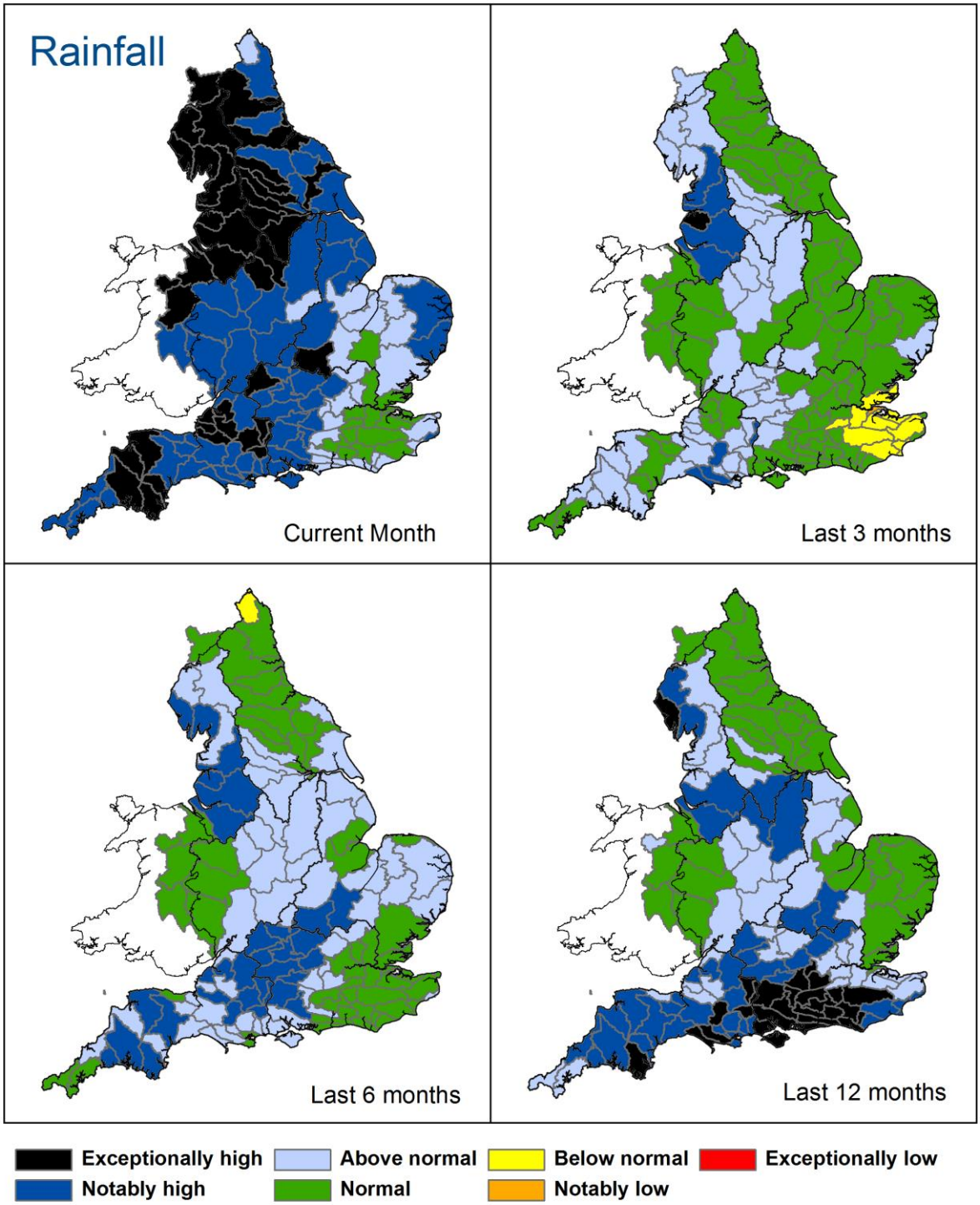


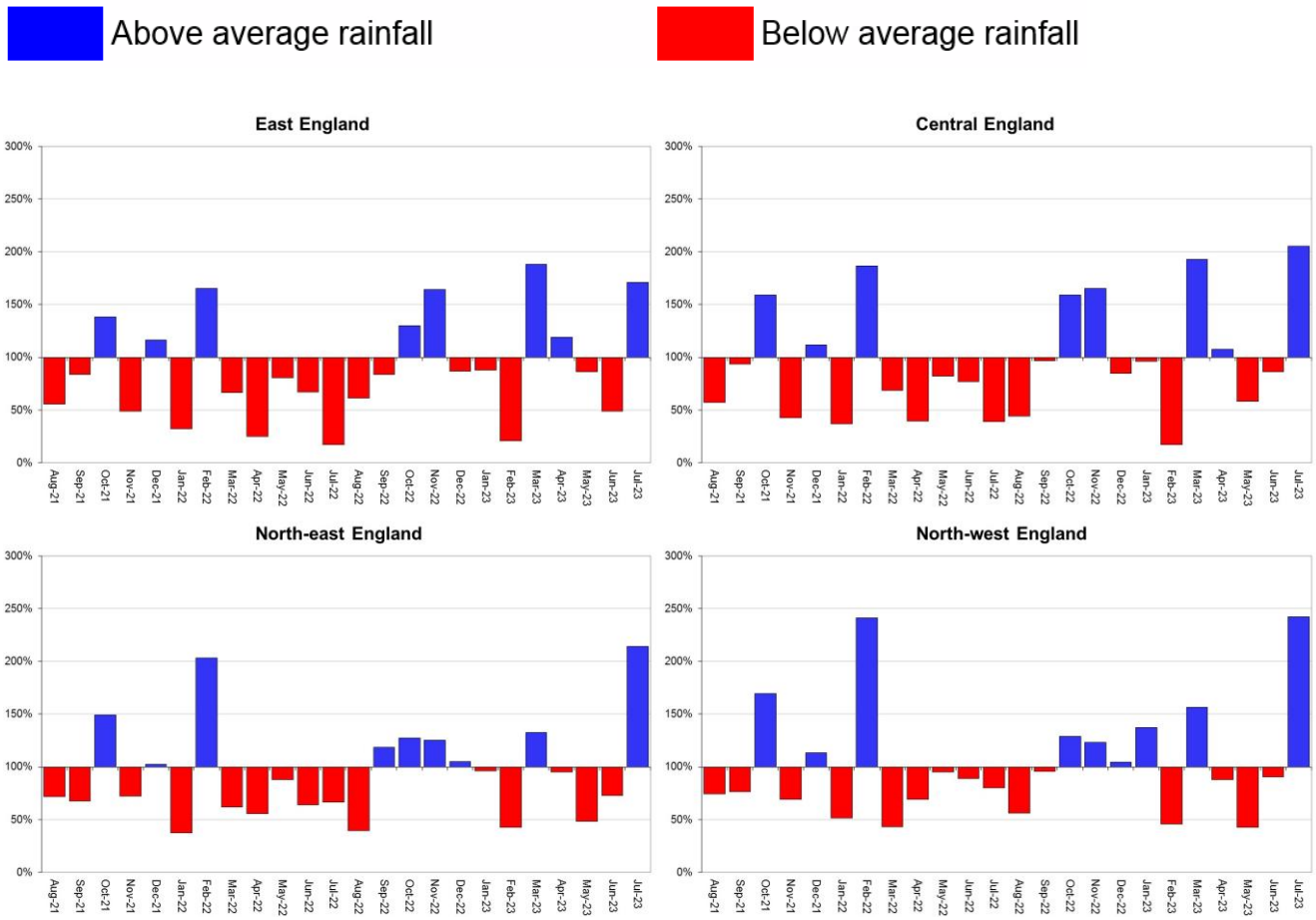
Figure 2.2: Total rainfall for hydrological areas across England for the current month (up to 31 July 2023), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals.

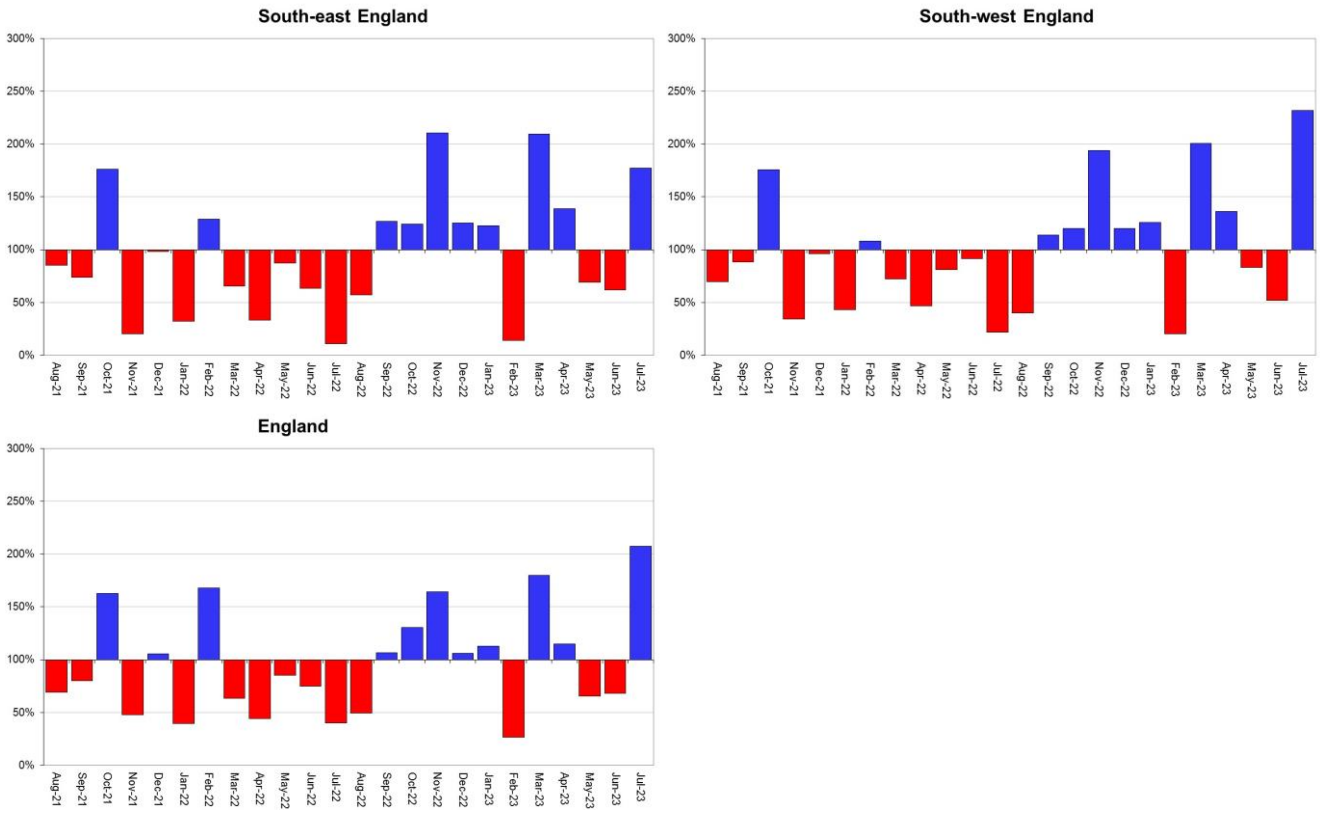


HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2023). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved.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

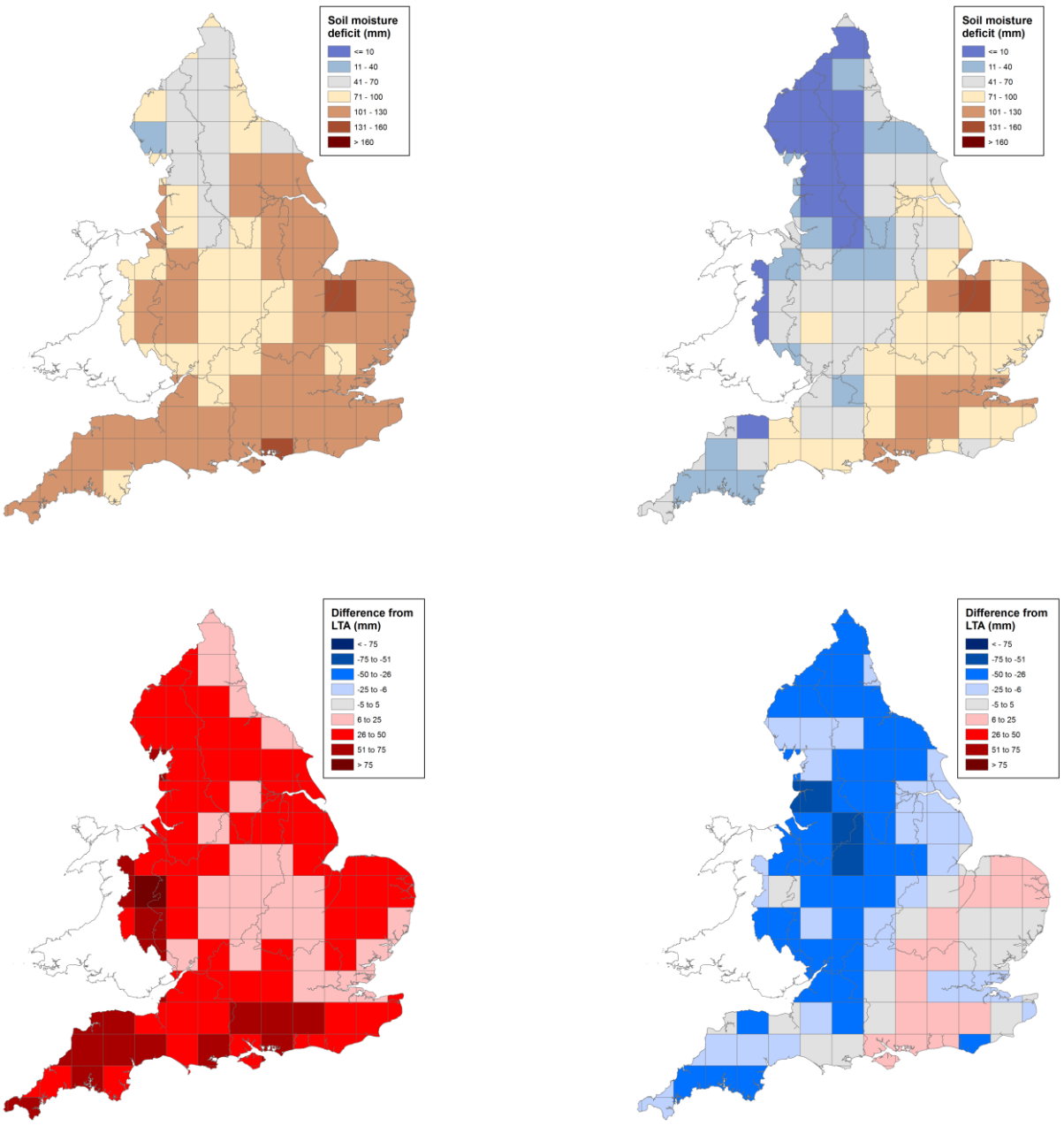
3 Soil moisture deficit

3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending, 28 June 2023 (left panel) and 02 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.

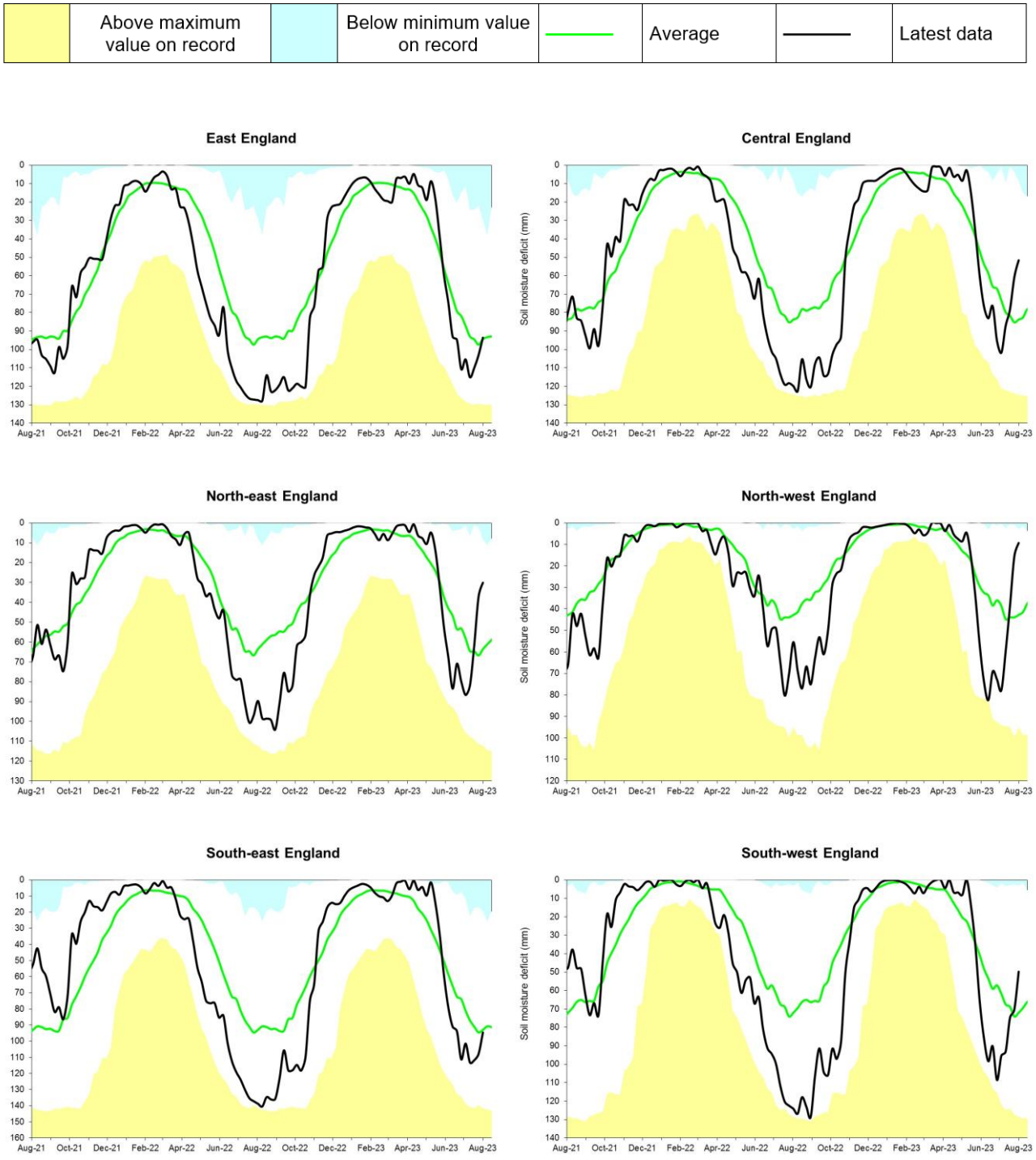
End of June 2023

End of July 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.



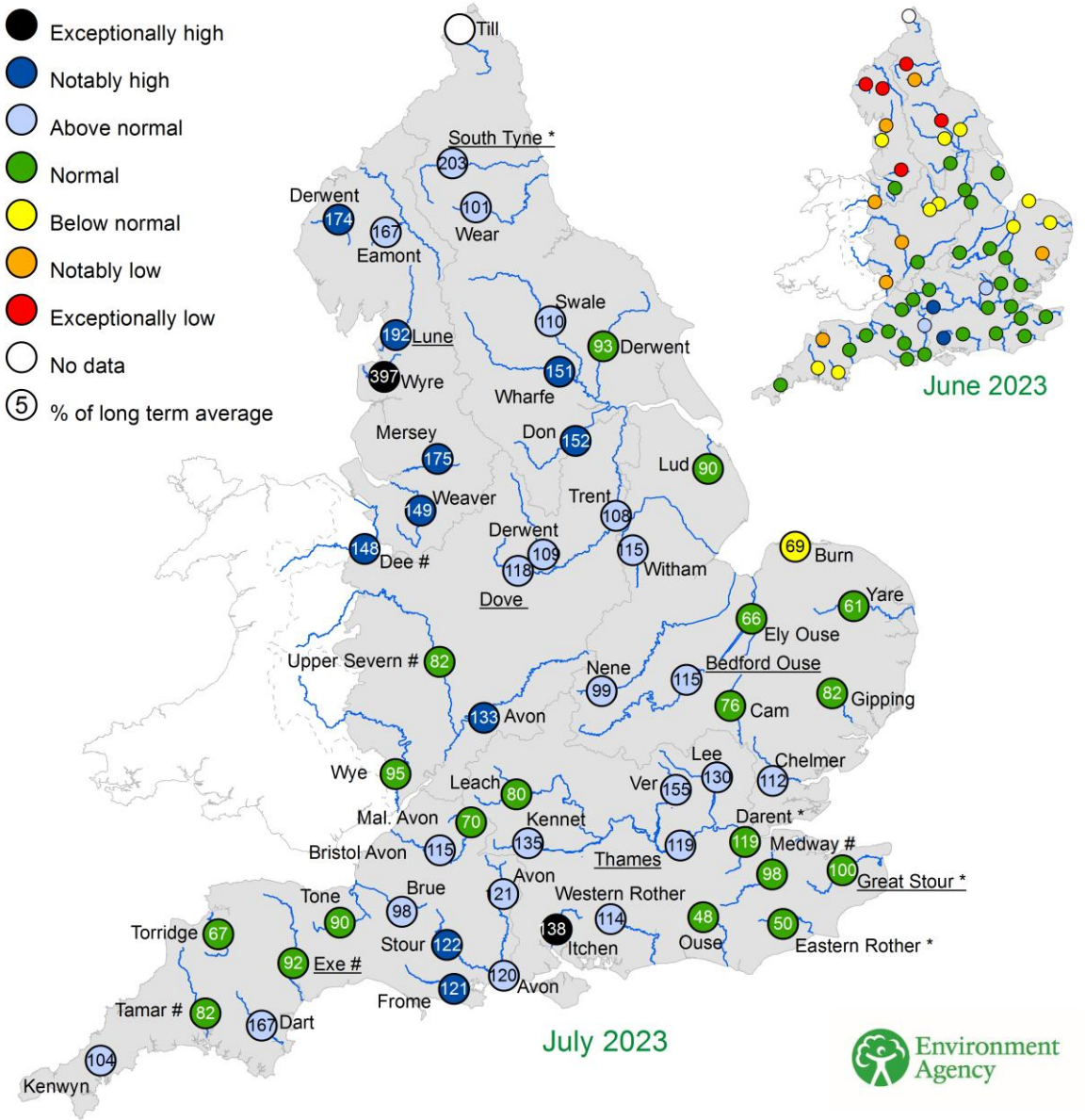
(Source: Met Office. Crown copyright, 2023).

4 River flows

4.1 River flow map

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

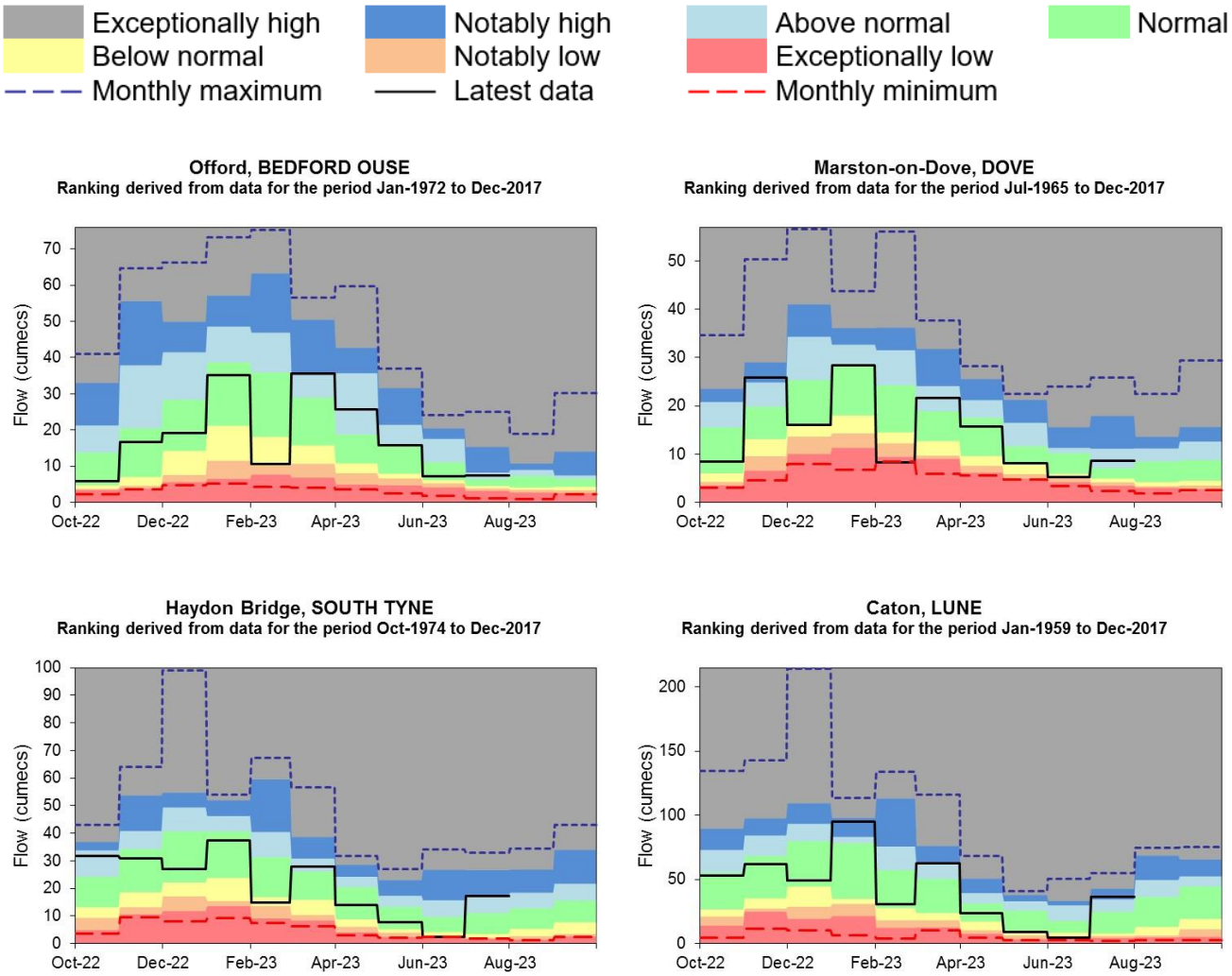
Naturalised flows are provided for the River Thames and the River Lee. +/- Monthly mean flow is the highest/lowest on record for the current month (note that record length varies between sites). * Flows may be overestimated at these sites – data should be treated with caution. # Flows may be impacted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

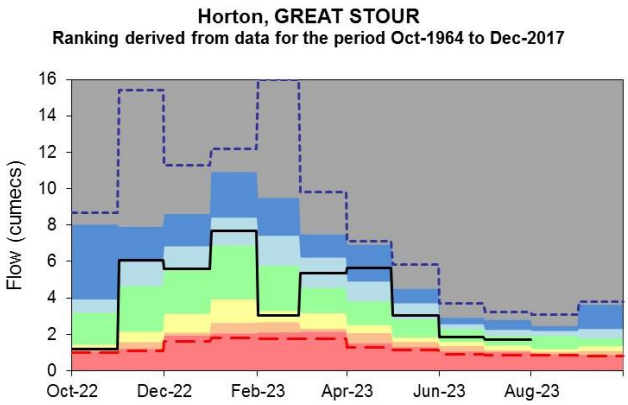


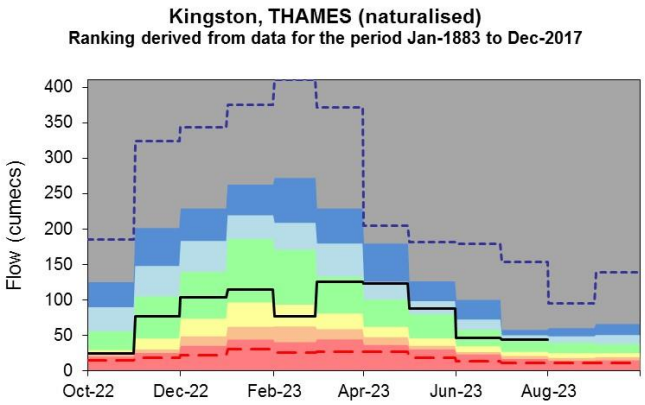
(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2023.

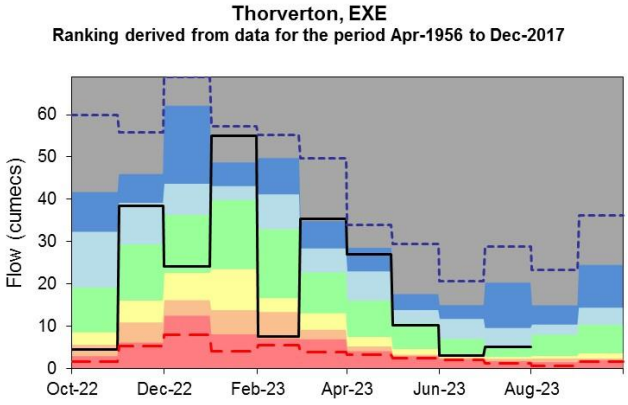
4.2 River flow charts

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.









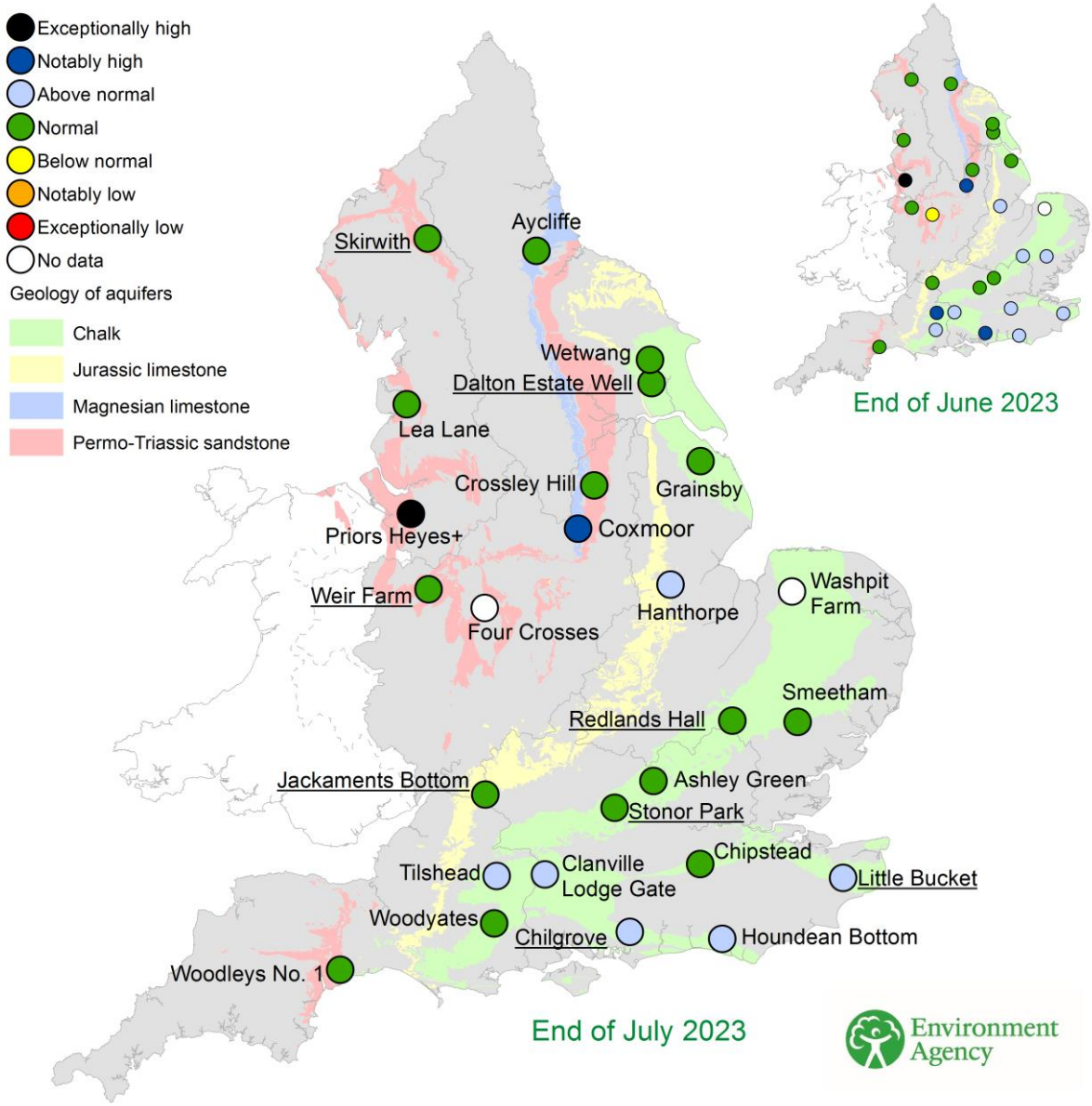
(Source: Environment Agency).

5 Groundwater levels

5.1 Groundwater levels map

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

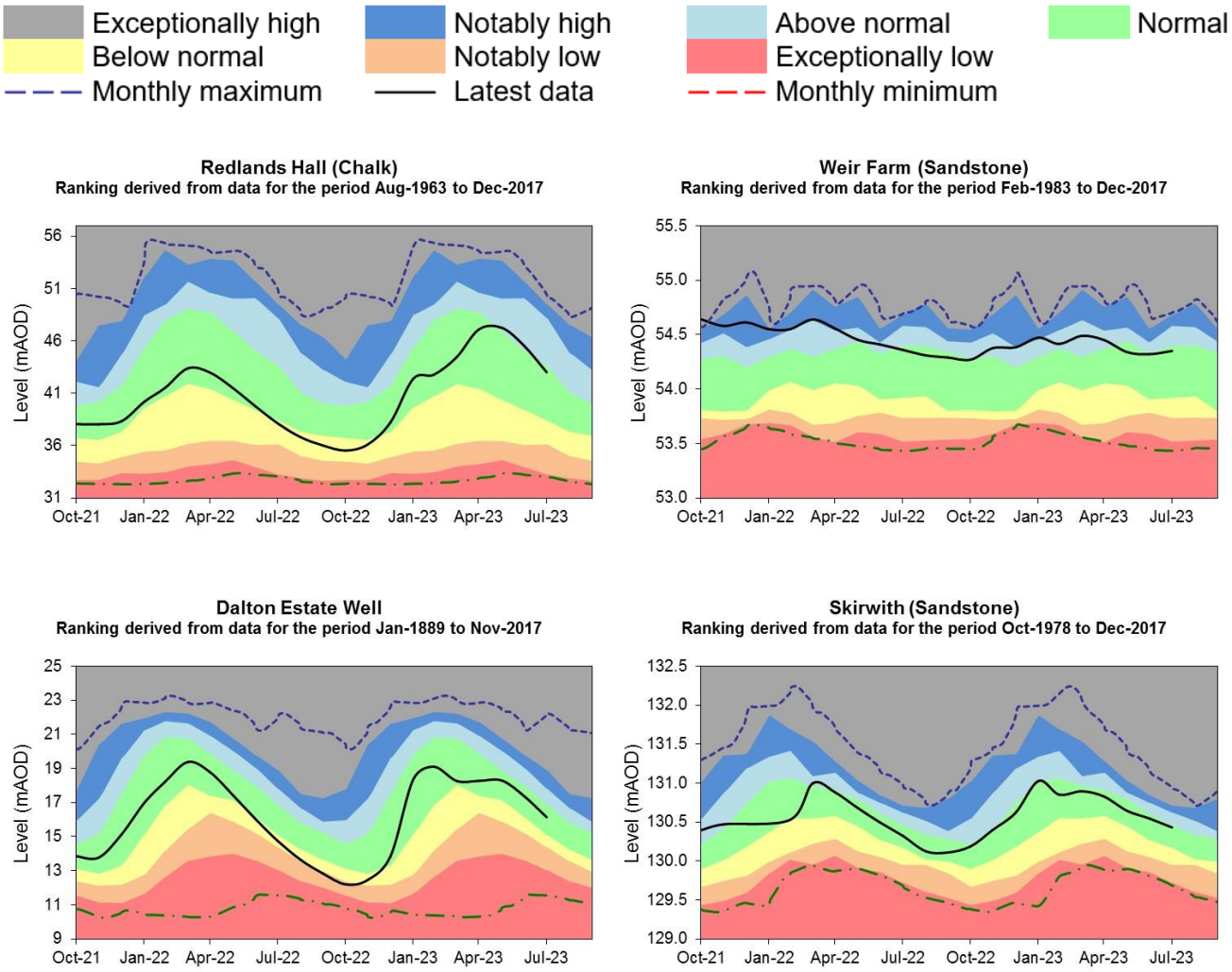
Redlands Hall is manually dipped at different times during the month and so may not be fully representative of month end levels. Levels at Priors Heyes remain high compared to historic levels because the aquifer is recovering from the effects of historic abstraction. +/- End of month groundwater level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

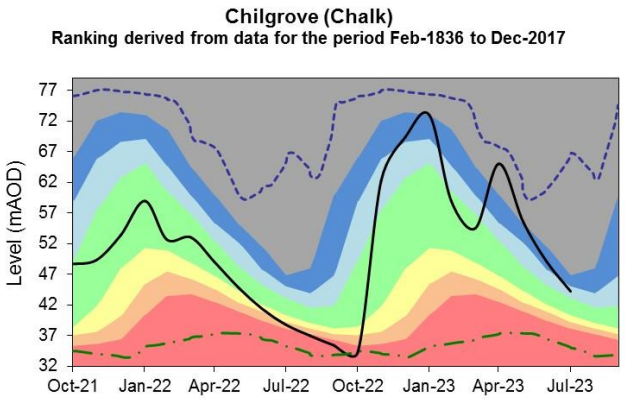


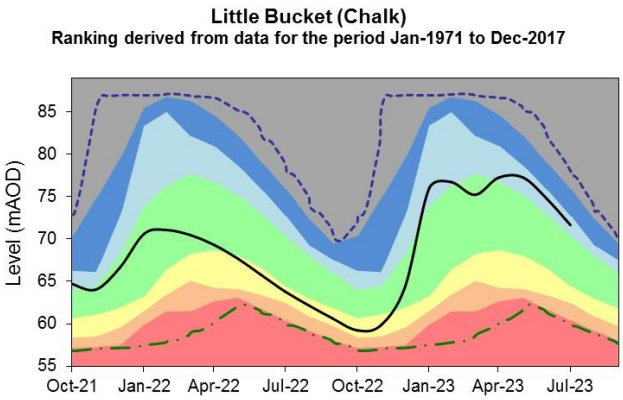
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2023.

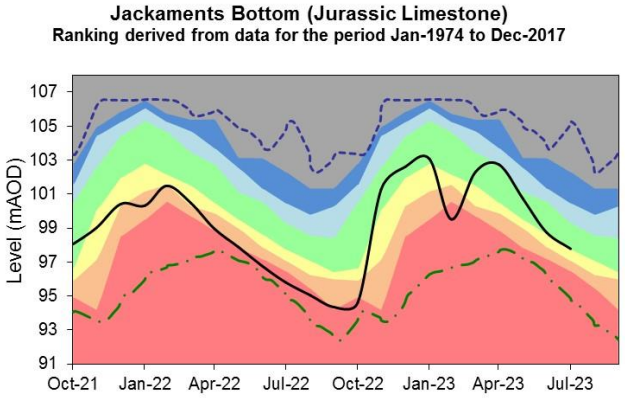
5.2 Groundwater level charts

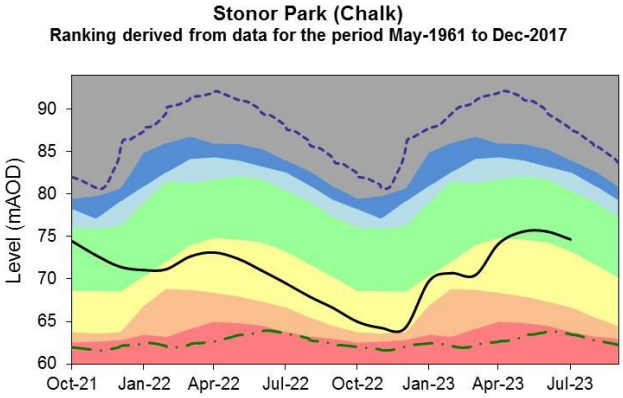
Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. Past 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.









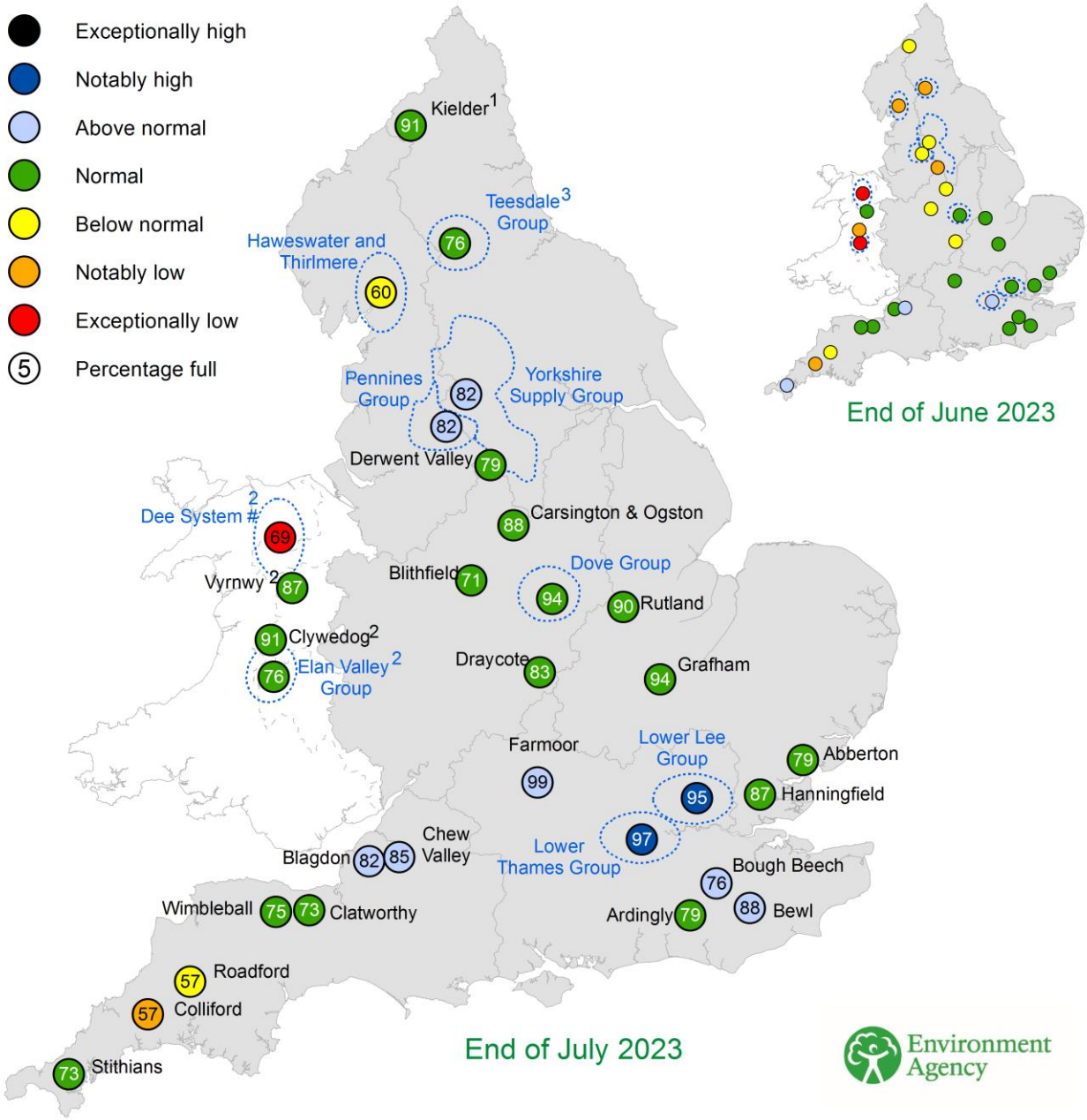


(Source: Environment Agency, 2023)

6 Reservoir storage

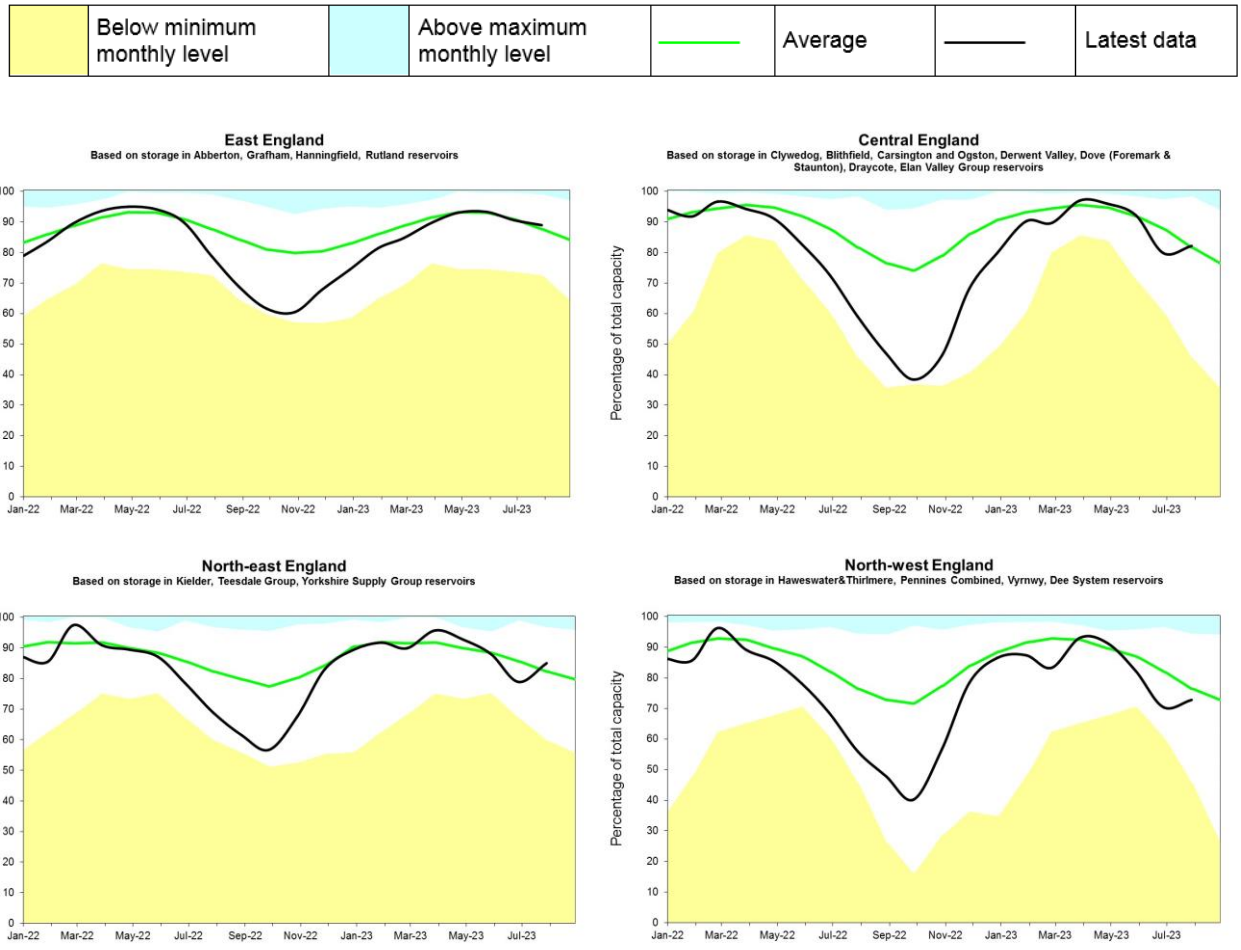
6.1 Reservoir storage map

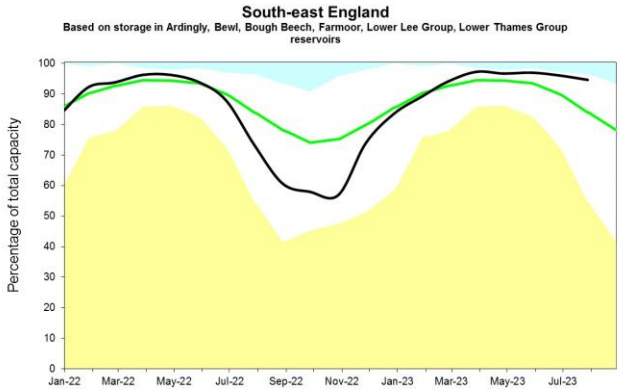
Figure 6.1: Reservoir stocks at key individual and groups of reservoirs at the end of June 2023 and July 2023 as a percentage of total capacity and classed relative to an analysis of historic June and July values respectively. Note: Classes shown may not necessarily relate to control curves or triggers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

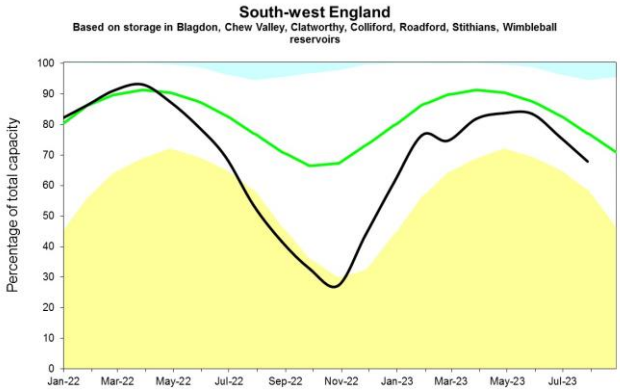


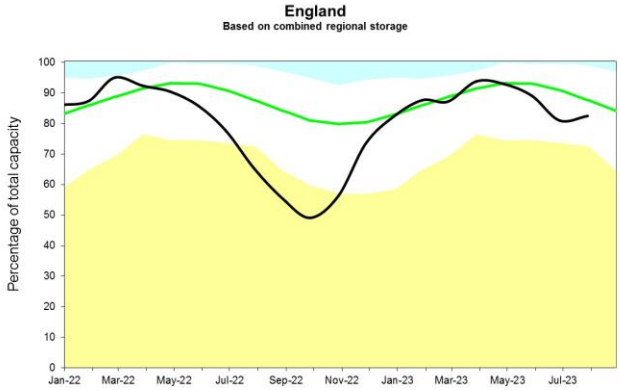
6.2 Reservoir storage charts

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.







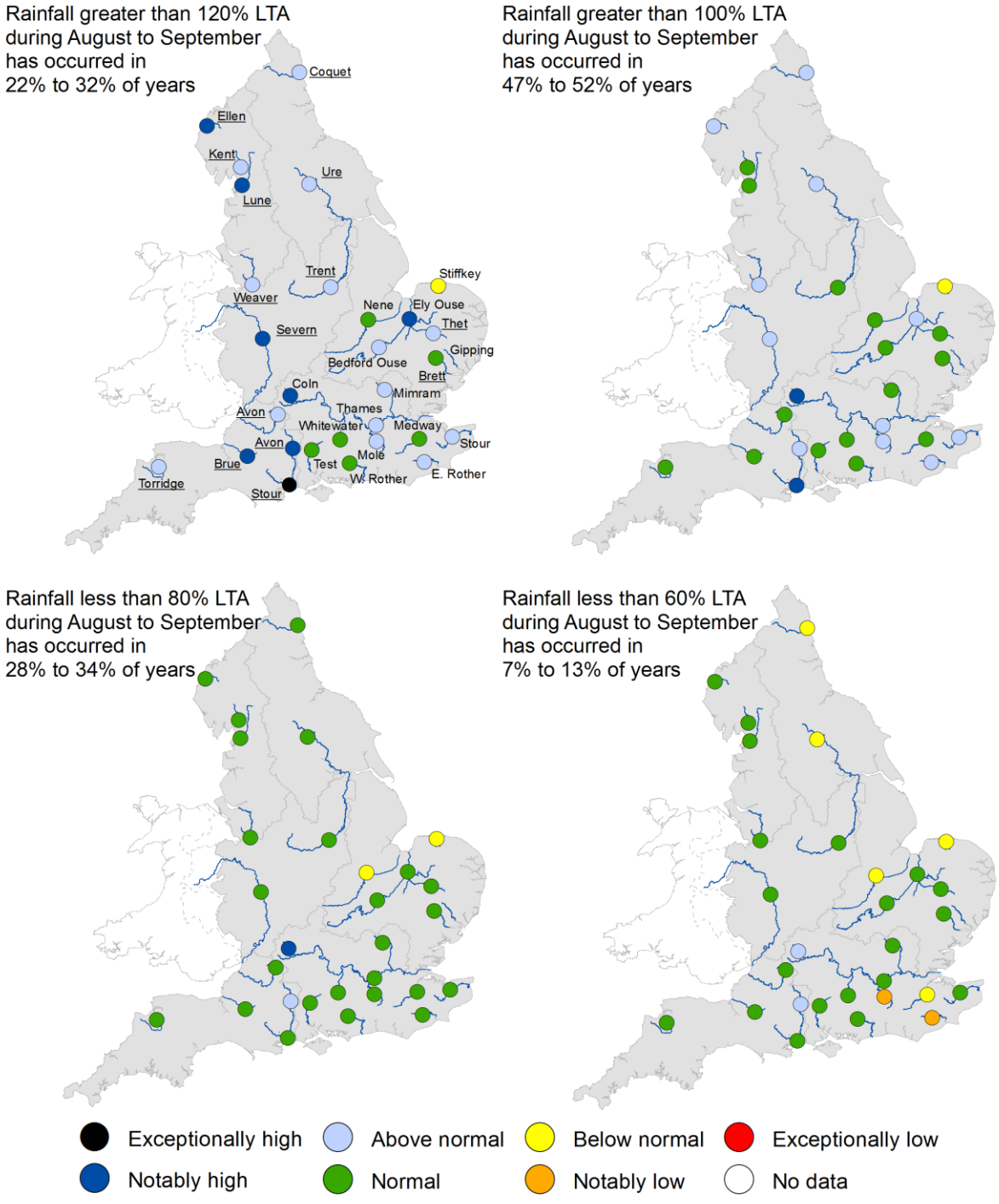


(Source: Water Companies).

7 Forward look

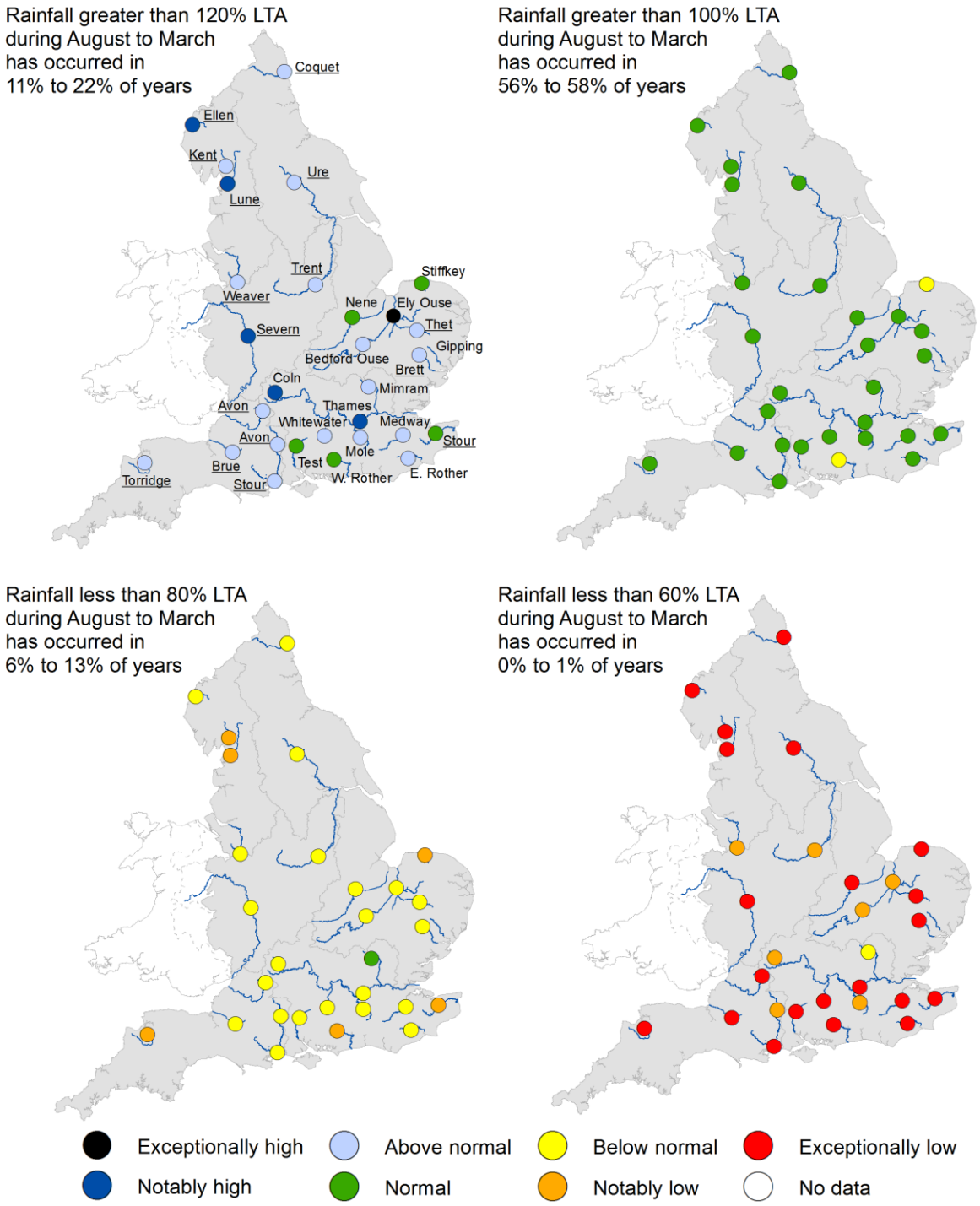
7.1 River flow

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 between August 2023 and September 2023. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by CEH.



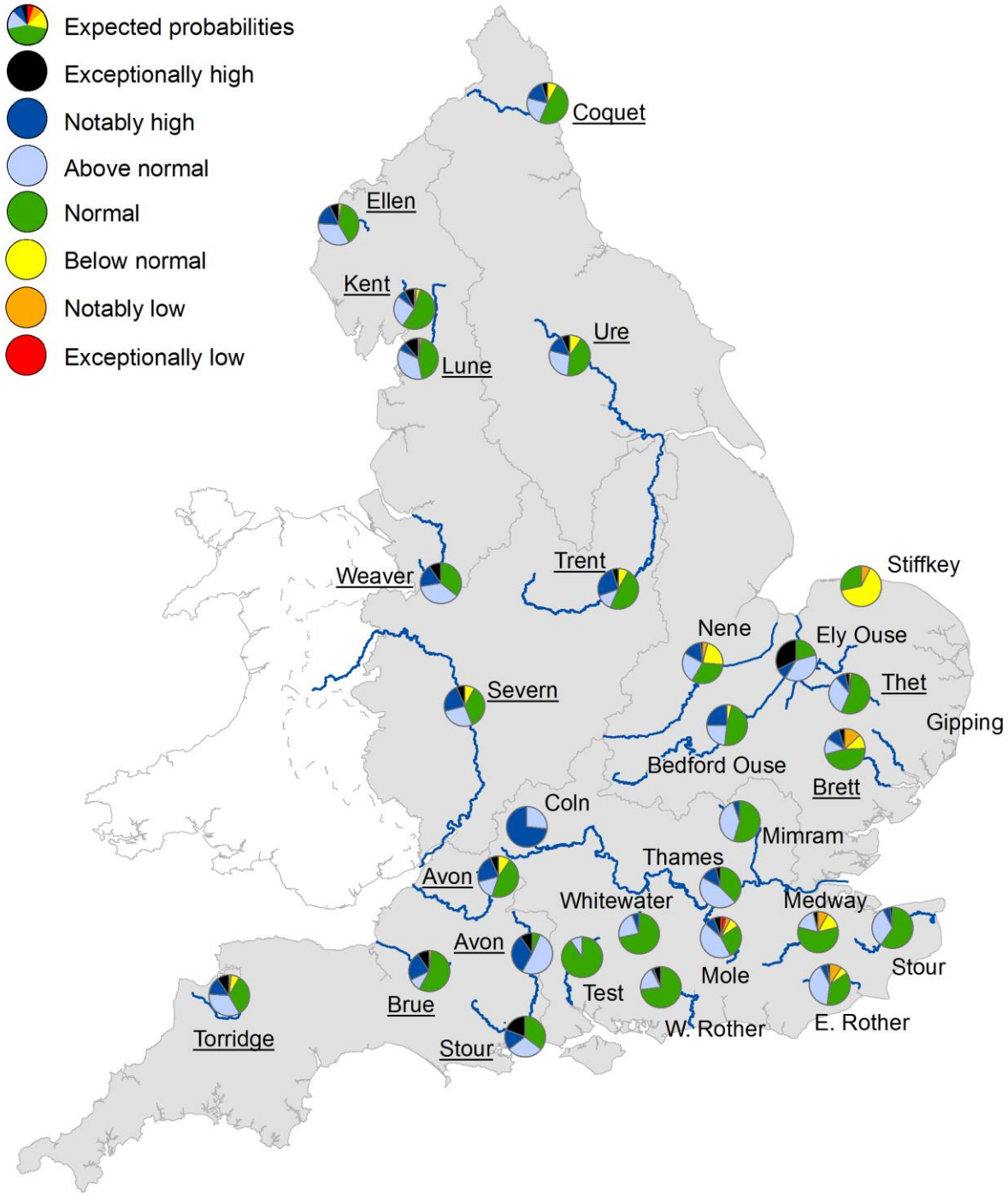
(Source: UK Centre for Ecology and Hydrology, Environment Agency).

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



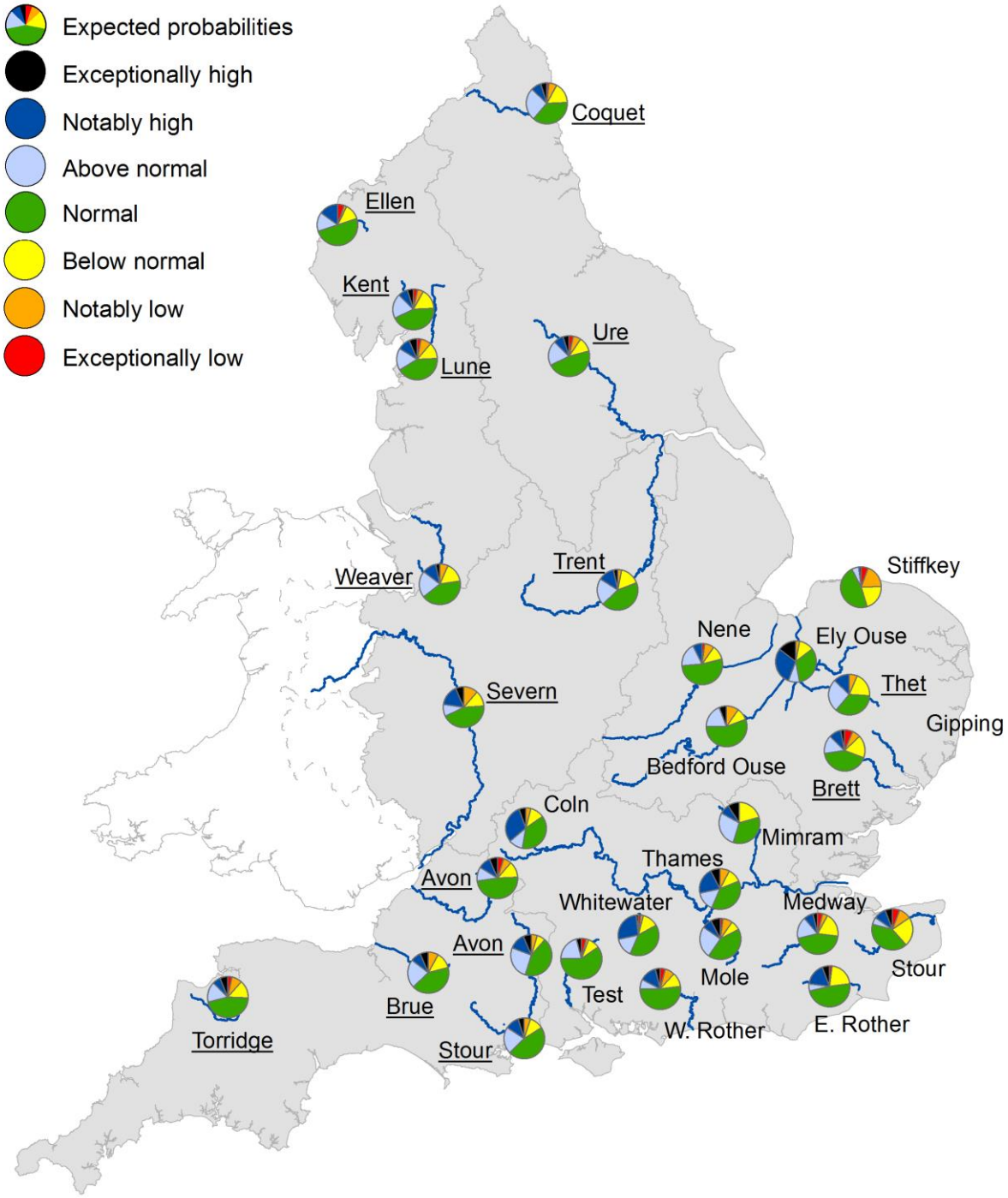
(Source: UK Centre for Ecology and Hydrology, Environment Agency)

Figure 7.3: Probabilistic ensemble projections of river flows at key indicator sites up until the end of 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 between August 2023 and September 2023. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by BGS.

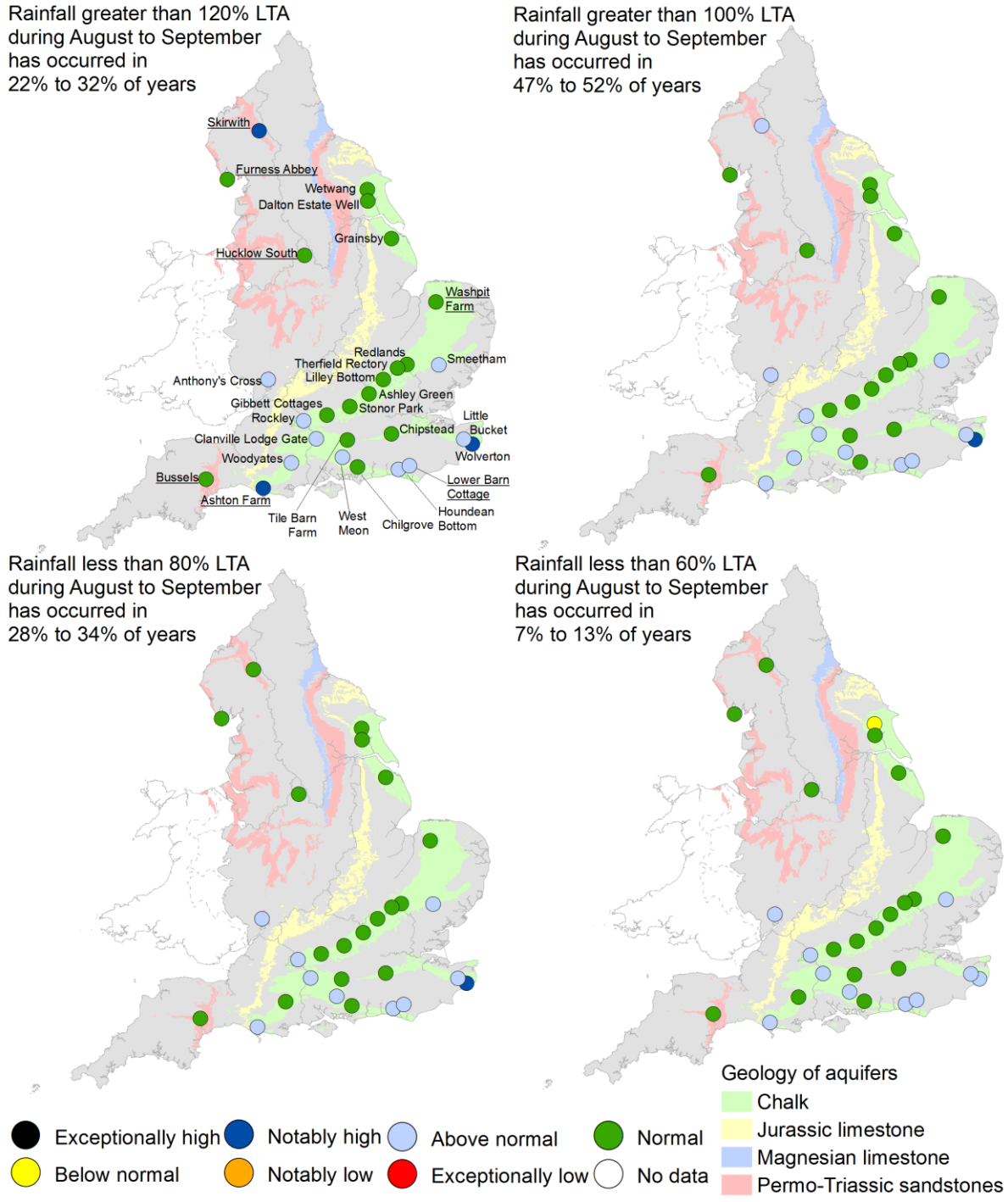


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Figure 7.6: Projected groundwater levels at key indicator sites at the end of March 2024. Projections based on four scenarios: 120%, 100%, 80% and 60% of long term average rainfall between August 2023 and March 2024. Rainfall statistics based on occurrence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

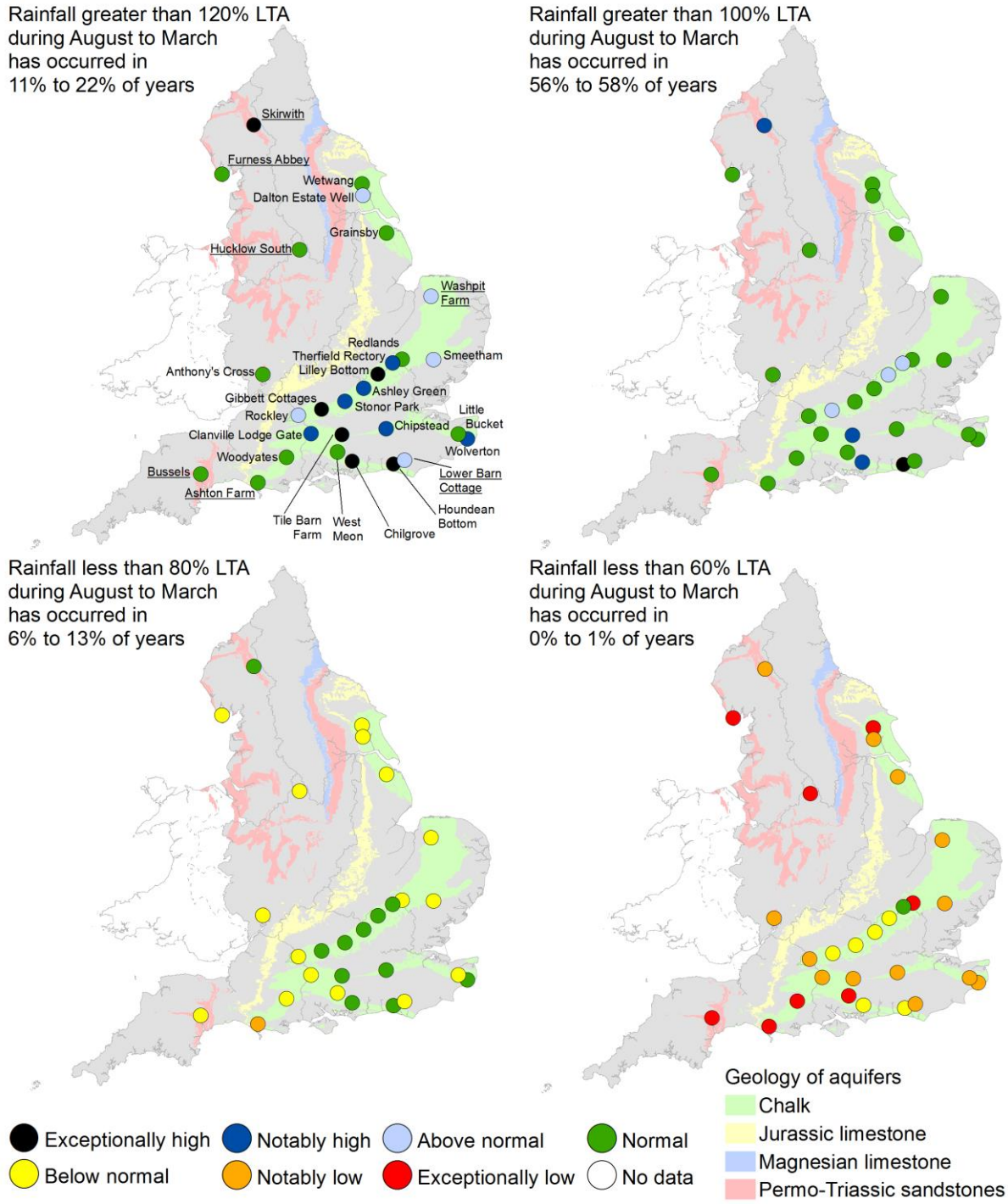

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Figure 7.7: Probabilistic ensemble projections of groundwater levels at key indicator sites at the end of September 2023. Pie charts indicate probability, based on climatology, of the groundwater level at each site being e.g. exceptionally low for the time of year. Projections for underlined sites produced by BGS.

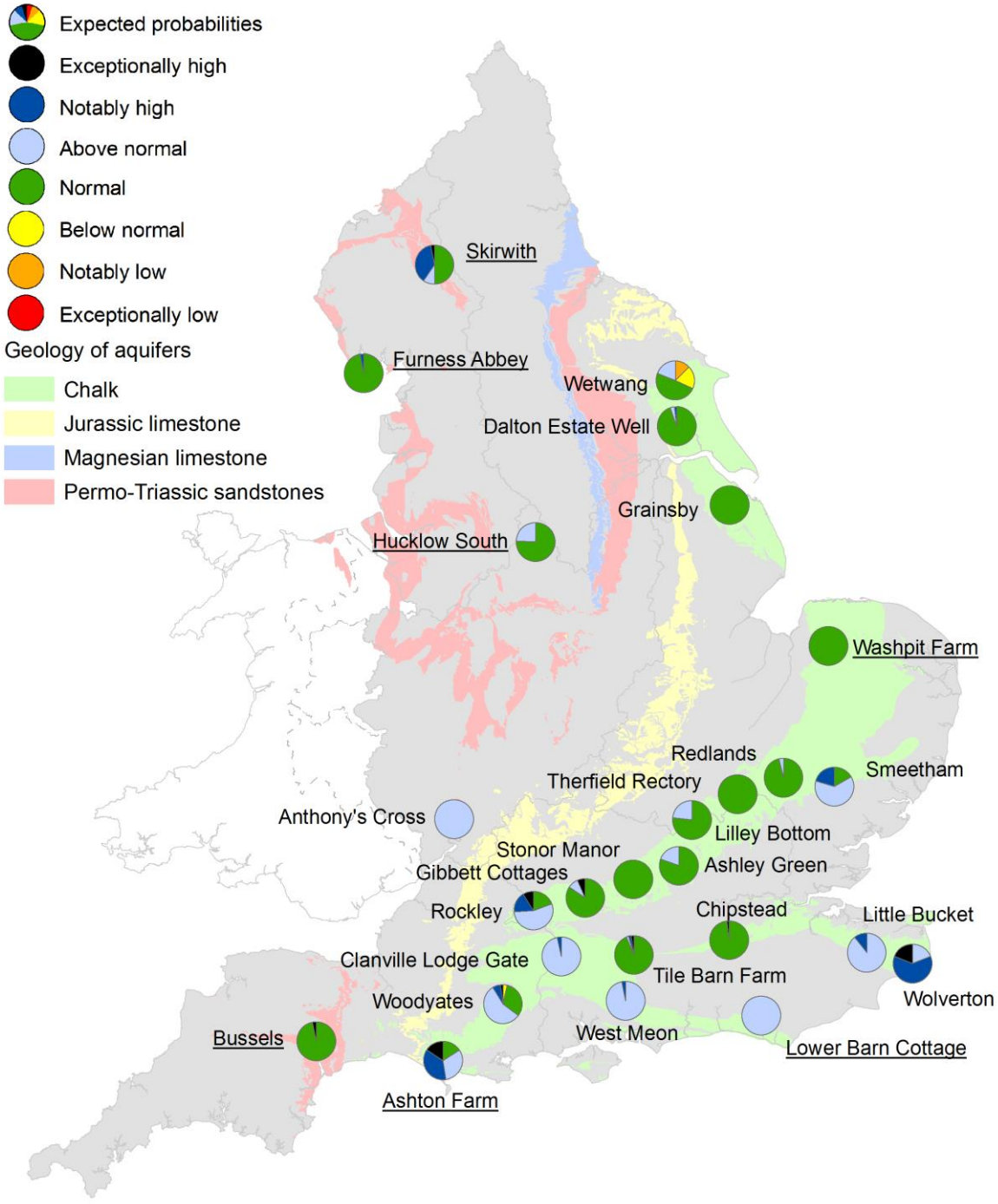

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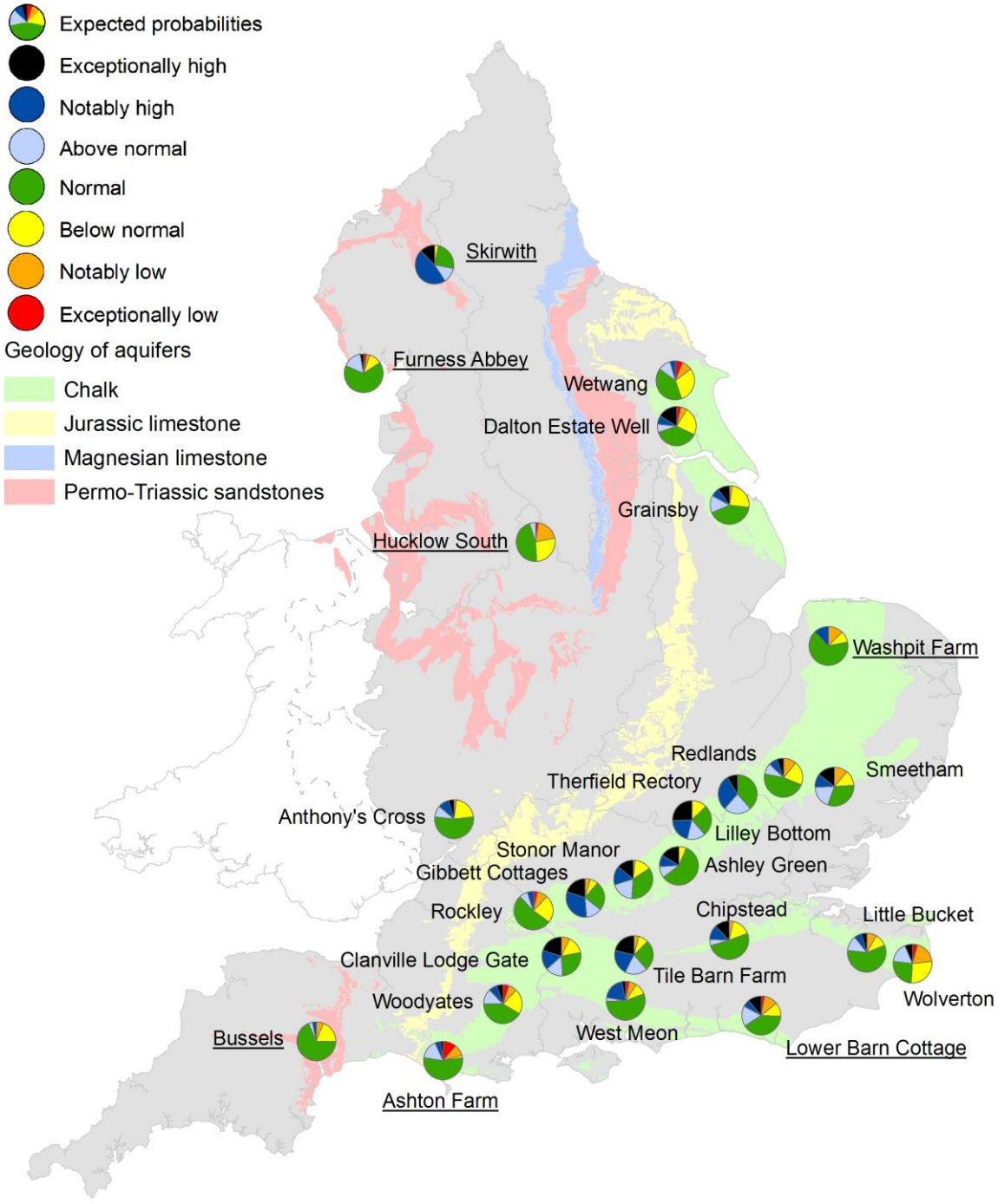
Figure 7.8: Probabilistic ensemble projections of groundwater levels at key indicator sites at the end of March 2024. Pie charts indicate probability, based on climatology, of the groundwater level at each site being e.g. exceptionally low for the time of year. Projections for underlined sites produced 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 (m^3s^{-1} or m^3/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

9 Appendices

9.1 Rainfall table

Region	Jul 2023 rainfall % of long term average 1961 to 1990	Jul 2023 band	May 2023 to July 2023 cumulative band	Feb 2023 to July 2023 cumulative band	Aug 2022 to July 2023 cumulative band
East England	171	Above Normal	Normal	Normal	Normal
Central England	206	Notably High	Normal	Above normal	Normal
North-east England	214	Exceptionally High	Normal	Normal	Normal
North-west England	242	Exceptionally High	Notably high	Above normal	Above normal
South-east England	177	Above Normal	Normal	Above normal	Notably high
South-west England	232	Exceptionally High	Above normal	Above normal	Notably high
England	207	Exceptionally High	Normal	Above normal	Above normal

9.2 River flows table

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

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

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

9.3 Groundwater table

Geographic area	Site name	Aquifer	End of Jul 2023 band	End of Jun 2023 band
East	Grainsby	Grimsby Ancholme Louth Chalk	Normal	Normal
East	Redlands Hall	Cam Chalk	Normal	Above normal
East	Hanthorpe	Cornbrash (South)	Above normal	Above normal
East	Smeetham Hall Cott.	North Essex Chalk	Normal	Above normal
East	Washpit Farm Rougham	North West Norfolk Chalk	No data	No data
Central	Four Crosses	Grimsby Ancholme Louth Limestone	No data	Below normal
Central	Weir Farm	Bridgnorth Sandstone Formation	Normal	Normal
Central	Coxmoor	Permo Triassic Sandstone	Notably 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 (sandstone)	Carlisle Basin Permo-Triassic sandstone	Normal	Normal
North West	Lea Lane	Fylde Permo-Triassic Sandstone	Normal	Normal
South East	Chilgrove	Chichester-Worthing-Portsdown Chalk	Above normal	Notably high
South East	Clanville Gate Gwl	River Test Chalk	Above normal	Above normal
South East	Houndean Bottom Gwl	Brighton Chalk Block	Above 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	Above normal
South West	Tilshead	Upper Hampshire Avon Chalk	Above normal	Notably high
South West	Woodleys No1	Otterton Sandstone Formation	Normal	Normal
South West	Woodyates	Dorset Stour Chalk	Normal	Above normal

9.4 Reservoir table

Geographic region	% Full	Average comparison
East England	89	Above average
Central England	82	Above average
North-east England	85	Above average
North-west England	73	Below average
South-east England	95	Above average
South-west England	68	Below average
England	82	Below average