

Monthly water situation report: England

1 Summary - May 2023

May was a dry month, with almost all catchments across England receiving below average rainfall. Soil moisture deficits increased across England, with soils in many places drier than would be expected for the time of year. River flows remain normal or higher at the majority of reported sites, although flows decreased at the nearly all sites. Groundwater levels decreased at many sites however almost all sites remain classed as normal or higher for the time of year. Reservoir stocks at the end of May decreased at almost two thirds of the reservoirs and reservoir groups we report on, three quarters of sites were classed as normal or higher for the time of year.

1.1 Rainfall

The May rainfall total for England was 39mm which represents 65% of the 1961 to 1990 long term average (LTA) for the time of year (68% of the 1991 to 2020 LTA). With the exception of thirteen catchments in the south west and eastern England, all catchments received below average rainfall during May. The wettest hydrological area was West Dorset Streams in south west England which received 131% of LTA rainfall during May. The driest hydrological area (relative to its LTA) was the Romney Marsh catchment in south east England receiving 32% of LTA rainfall for the time of year. (Figure 2.1)

May rainfall totals were classed as normal for the time of year in the majority of catchments across England. Nearly a third of the catchments were classed as below normal and almost a quarter were notably low for the time of year. At the regional scale, south east, south west and east England all received normal rainfall during May. North east and north west England both received notably low rainfall for the time of year while central England received below normal rainfall. May rainfall across England as a whole was below normal for the time of year. (Figure 2.2).

The 3 month cumulative rainfall totals show that all but one catchment, the Tweed, were classed as normal or higher, with a nearly three quarters notably or exceptionally high. The 6 month cumulative rainfall totals show the majority of catchments are either normal or above normal for the period. Twelve month cumulative rainfall totals were normal for more than half of catchments in England, more than a third of catchments, predominantly across southern England were above normal or higher. (Figure 2.3)

1.2 Soil moisture deficit

Soil moisture deficits (SMD) have increased across England at the end of May following the below average rainfall and higher temperatures across most of the country. Soil moisture deficits across England increased significantly particularly during the second half of the month. (Figure 3.1)

May SMD values across the majority of England are now higher than average for the time of year, meaning soils are drier than would be expected. At a regional scale, the end of May SMDs are higher than average for the time of year particularly across west areas of England. (Figure 3.2)

1.3 River flows

May monthly mean river flows decreased at all but one of indicator sites we report on however the majority of sites were remain above normal or higher for the time of year. Nearly a third of sites were normal for the time of year, while the 10 sites primarily in the north of the country are classed as below normal. (Figure 4.1)

Monthly mean river flows declined at all regional index sites during May. May monthly mean flows at Offord on the Bedford Ouse, Horton on the Great Stour and the naturalised flows on the River Thames at Kingston were classed as above normal. Flows at the River Dove in central England, the River Exe in the south west, the South Tyne in the north east were classed as normal and River Lune in the north west was below normal for the time of year. (Figure 4.2)

1.4 Groundwater levels

At the end of May, groundwater levels decreased at more than half of reported indicator sites. Almost all end of month groundwater levels were classed as normal or higher for the time of year. Two sites were below normal for the time of year. (Figure 5.1)

The major aquifer index sites reflected a varied picture at the end of May, ranging from normal to exceptionally high levels. Normal groundwater levels for the time of year were reported at Dalton Estate Well in the Hull and East Riding Chalk, at Skirwith in the Carlisle Basin and Eden Valley Sandstone, at Jackaments Bottom in the Burford Jurassic Limestone, at Stonor Park in the South West Chilterns Chalk and at Weir Farm in the Bridgnorth Sandstone. Little Bucket in the East Kent Stour Chalk and Redlands Hall in the Cam and Ely Ouse Chalk were both above normal for the time of year. Chilgrove in the Chichester Chalk remains exceptionally high at the end of May after groundwater levels increased rapidly in the previous month. (Figure 5.2)

1.5 Reservoir storage

Reservoir stocks at the end of May had decreased at almost two thirds of the reservoirs and reservoir groups we report on. The remaining reservoirs and reservoir groups seen an increase or no change in stocks. The largest stock increase was at Grafham Reservoir in east England which saw a 7% change. In contrast, Haweswater and Thirlmere in north west England and the Teesdale Group in north east England both saw a decrease of 13% in reservoir stocks. A fifth of reservoirs or reservoir groups were classed as below normal or notably low at the end of May. All other reservoirs or reservoir groups were classed as normal or higher for the time of year. (Figure 6.1)

At a regional scale, total reservoir stocks ranged from 82% in north west England to 96% in south east England. Total reservoir stocks for England were 89% of total capacity at the end of May. (Figure 6.2)

1.6 Forward look

June began with fine and settled weather and these conditions are forecast to prevail throughout for the remainder of the month. There is an increased chance that the month will be warmer than average however there remains a good likelihood of usual temperatures. Rainfall in June is expected to be near average with an increased chance of localised thundery downpours.

For the 3 month period for the UK from June to August there is an increased chance of a hot summer and heatwaves. However, near average temperatures and rainfall remain the most likely outcomes. Notable differences in rainfall distribution are likely due to the showery and potential thundery nature of summer precipitation.

1.7 Projections for river flows at key sites

By the end of September 2023, river flows have a greater likelihood of being above normal or high in south east and south west England. In north west, north east and central England there is a slightly higher chance of river flows being below normal or lower. By the end of March 2024, river flows in the south east and south west of England have a greater likelihood of being above normal or higher. In north west, north east and central England there is a slightly higher chance of river flows being below normal or lower.

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 in south west and east England have a greater likelihood of being above normal or higher. Groundwater levels are most likely to be in their expected range across the rest of England. By the end of March 2024 groundwater levels have a greater likelihood of being above normal or higher in south east, east, and central England. In south west and north west England groundwater levels are most likely to be in their expected range. In north east England there is a slightly higher chance of groundwater levels being below normal or lower.

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

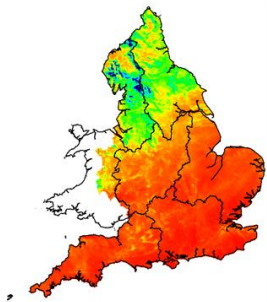
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2 Rainfall

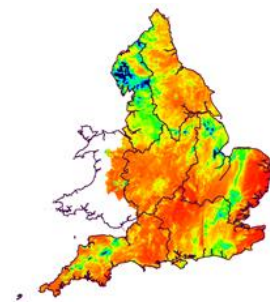
2.1 Rainfall map

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.

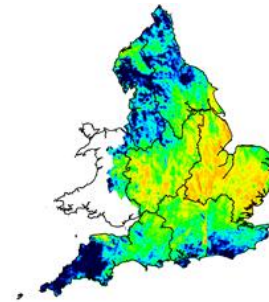
July 2022



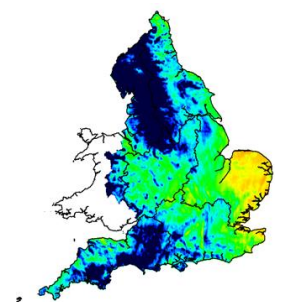
August 2022



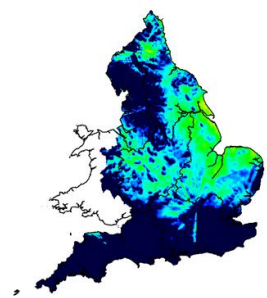
September 2022



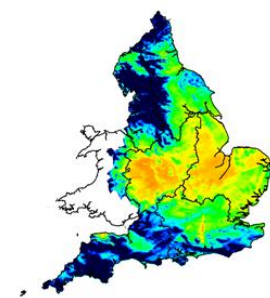
October 2022



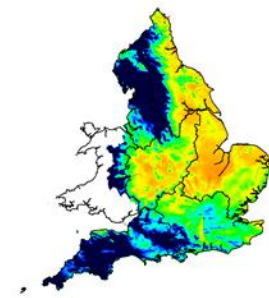
November 2022



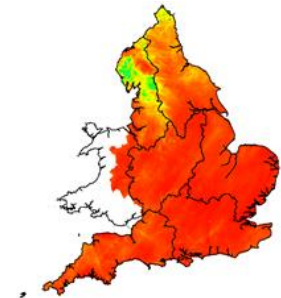
December 2022



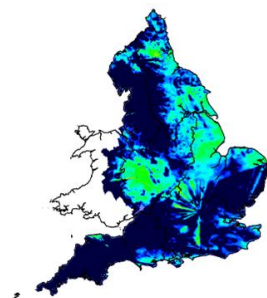
January 2023



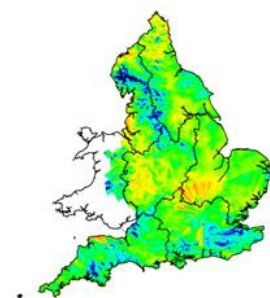
February 2023



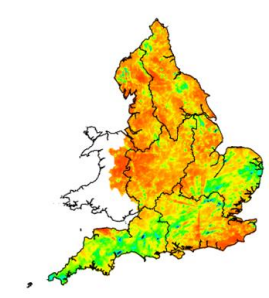
March 2023



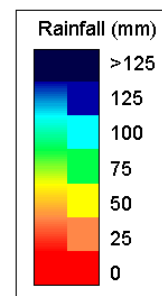
April 2023



May 2023

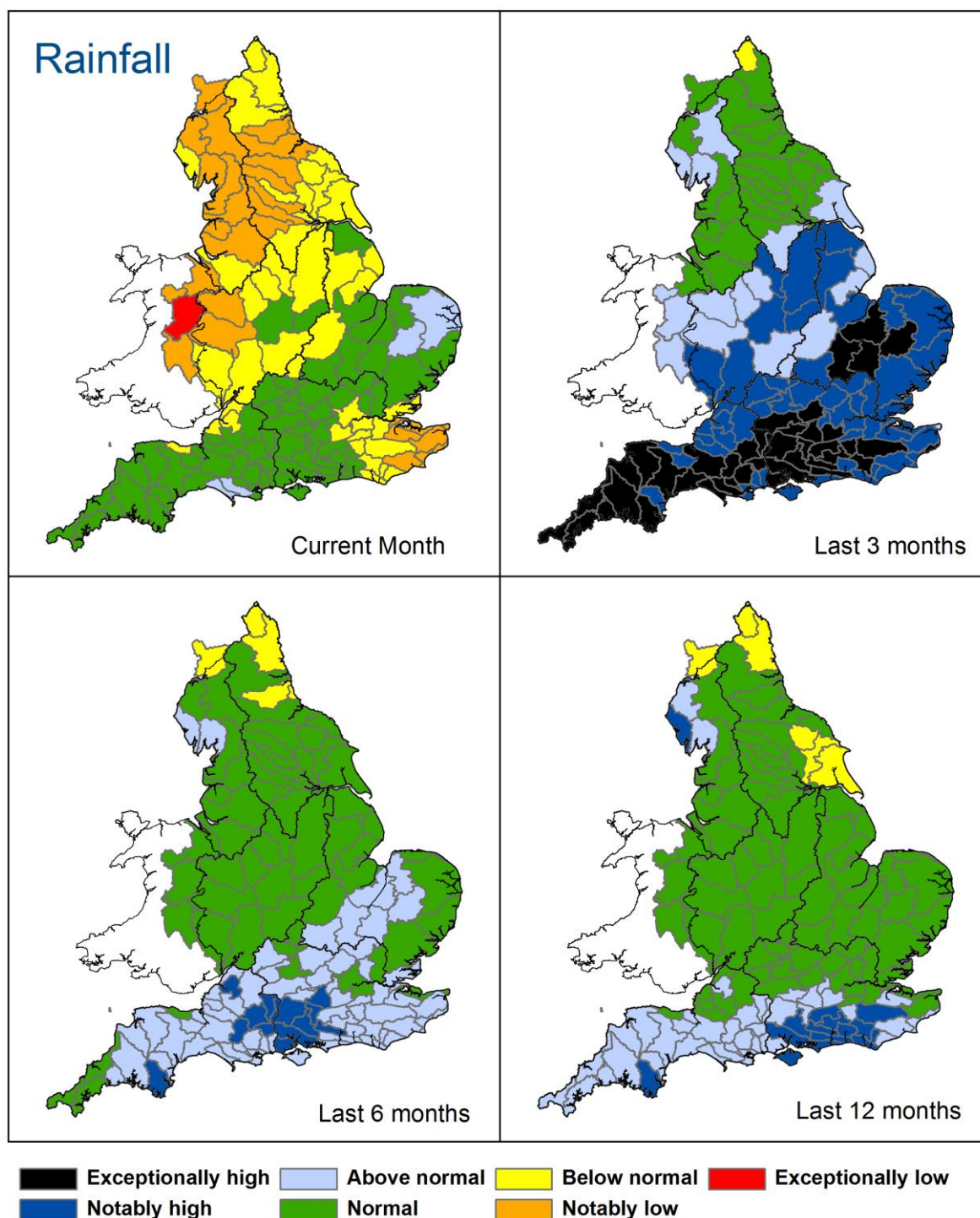


Map Legend



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

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



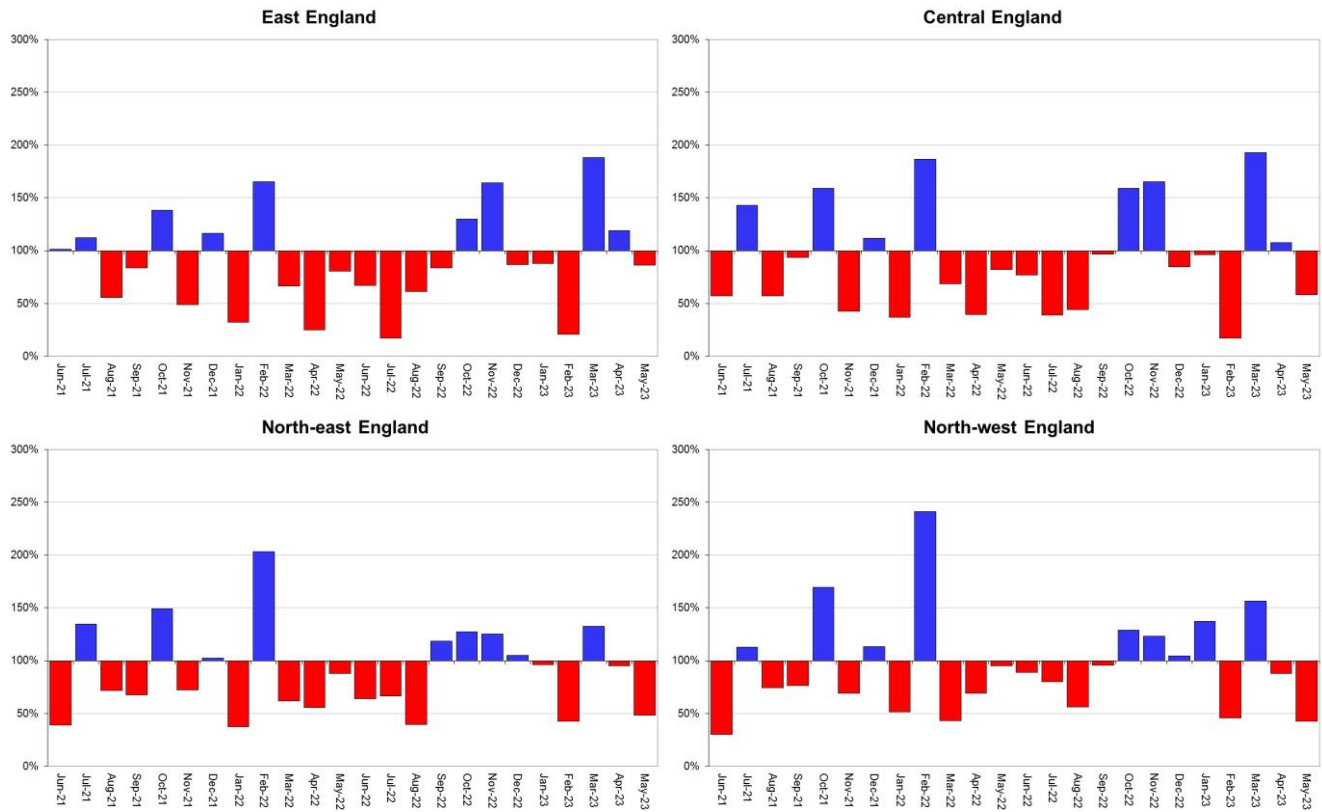
HadUK data based on the Met Office 1km gridded rainfall dataset derived from rain gauges (Source: Met Office. Crown copyright, 2023). Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. Crown copyright. All rights reserved.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

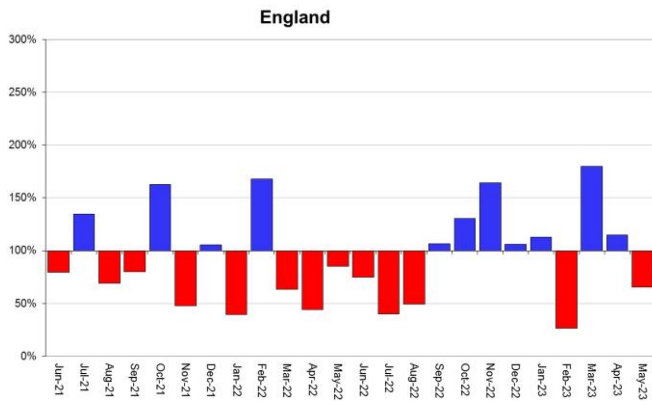
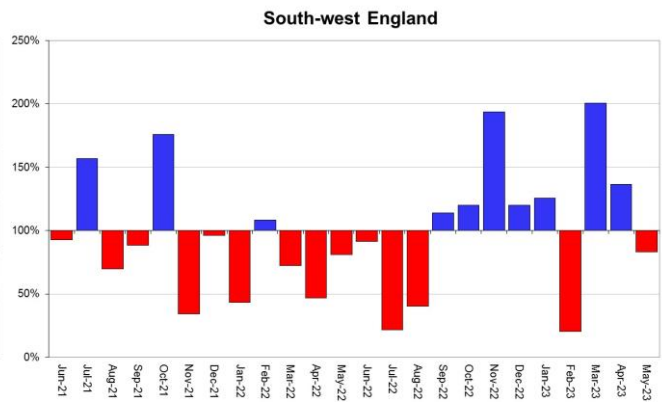
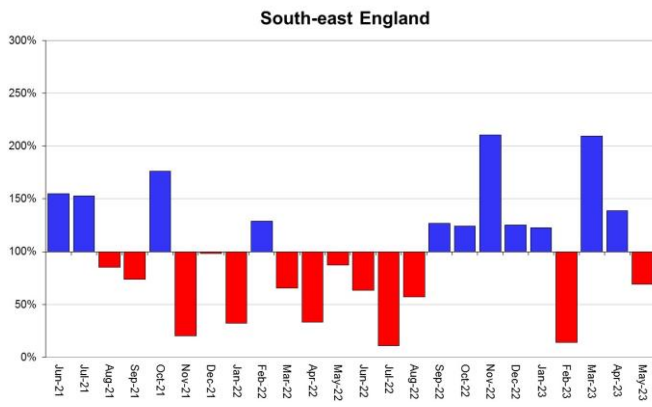
2.2 Rainfall charts

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.

■ Above average rainfall

■ Below average rainfall





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

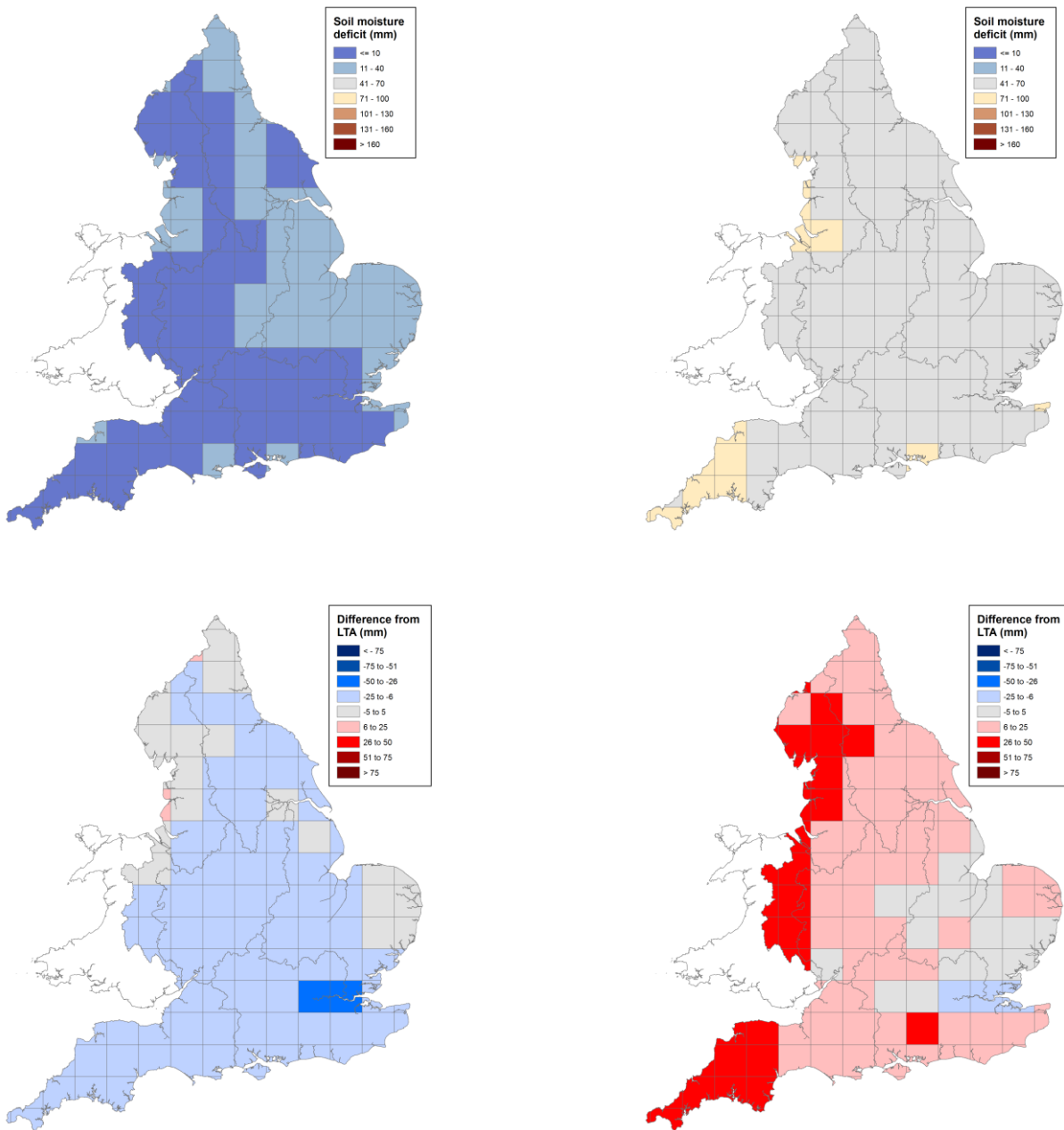
3 Soil moisture deficit

3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending, 03 May 2023 (left panel) and 31 May 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 April 2023

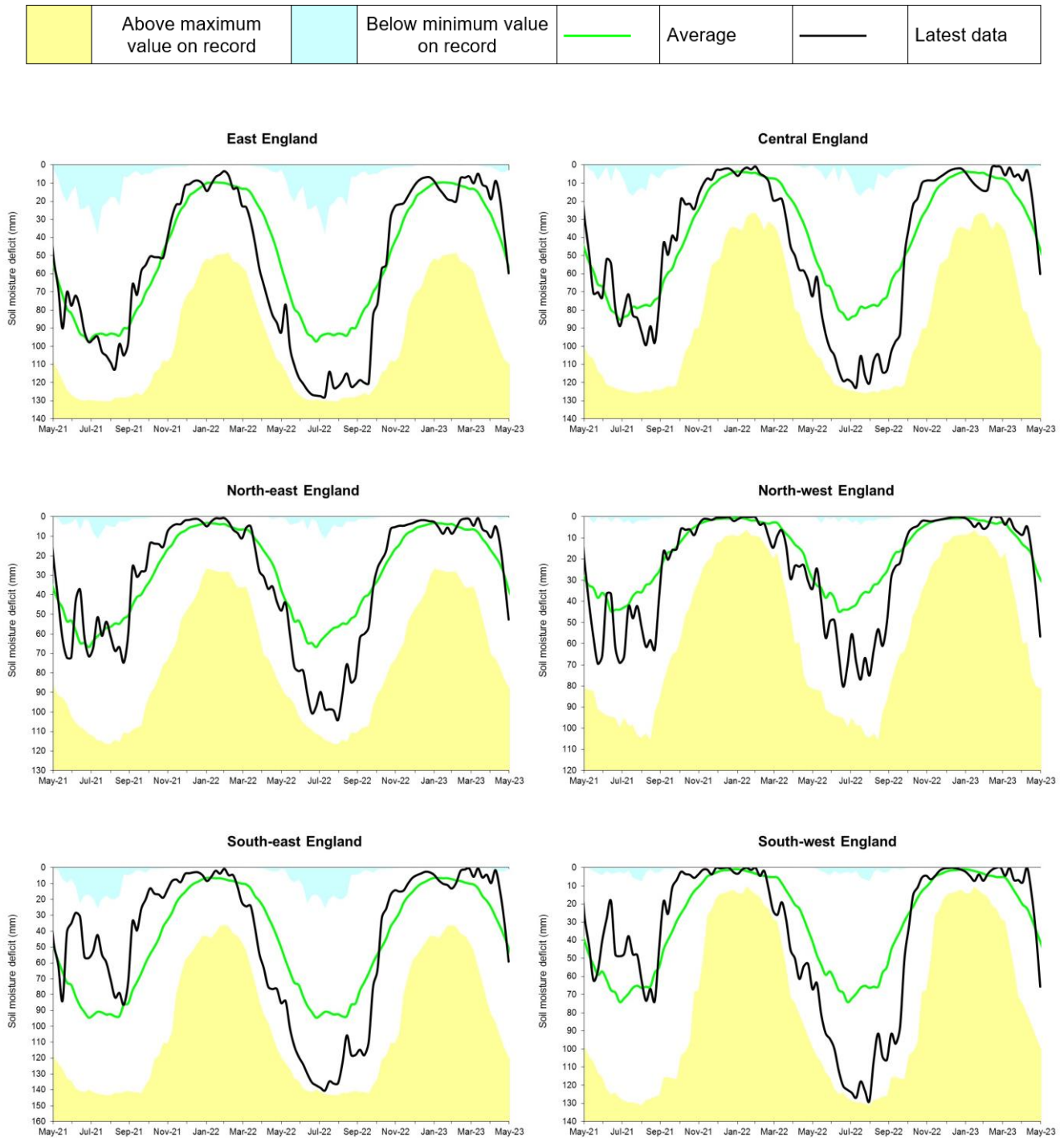
End of May 2023



(Source: Met Office. Crown copyright, 2023). Crown copyright. All rights reserved. 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.



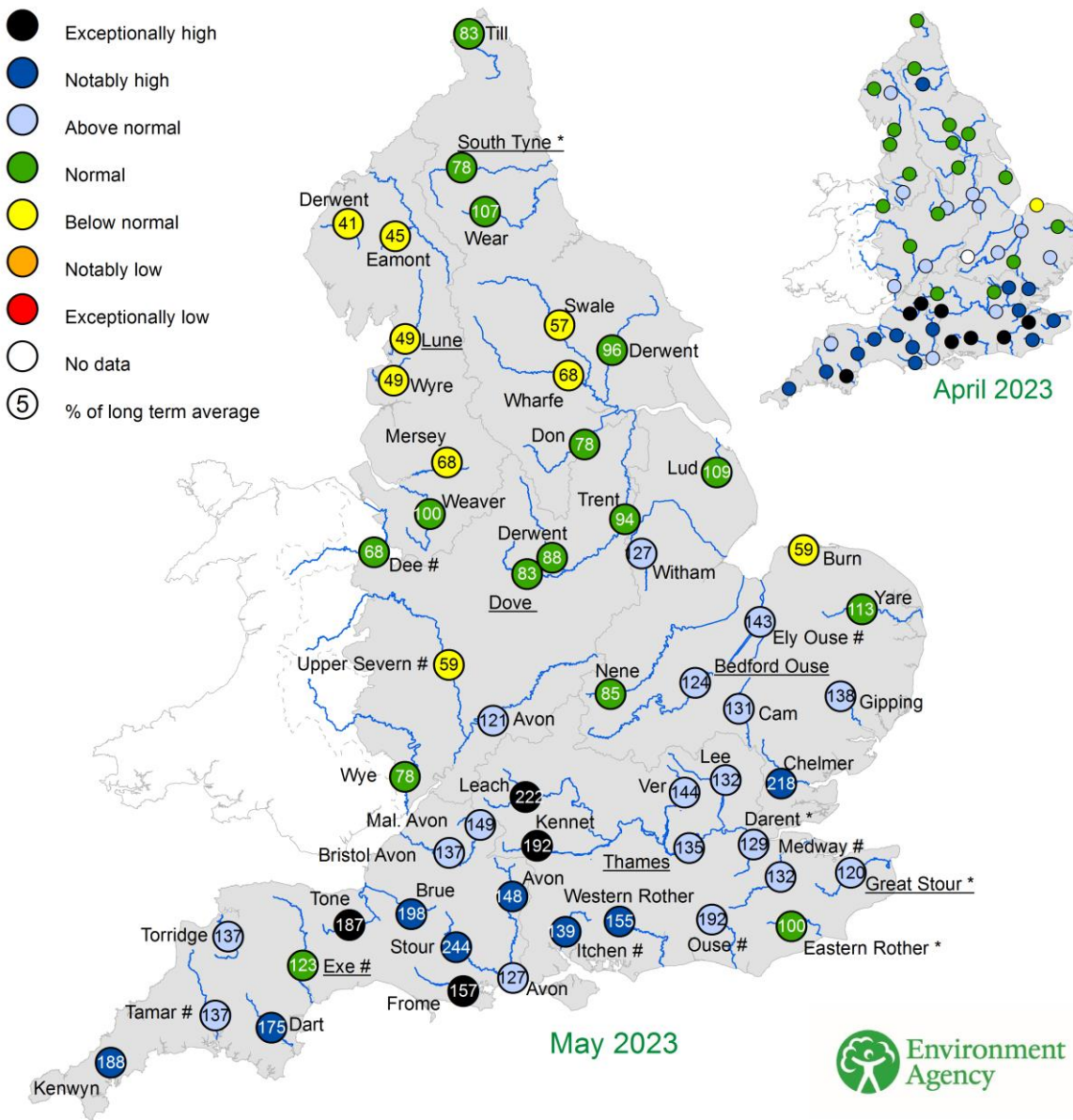
(Source: Met Office. Crown copyright, 2023).

4 River flows

4.1 River flow map

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

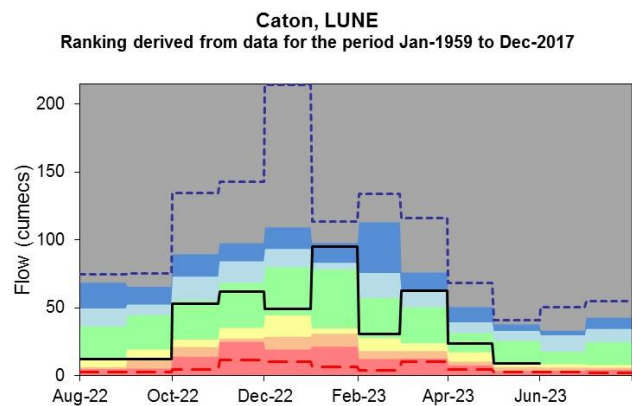
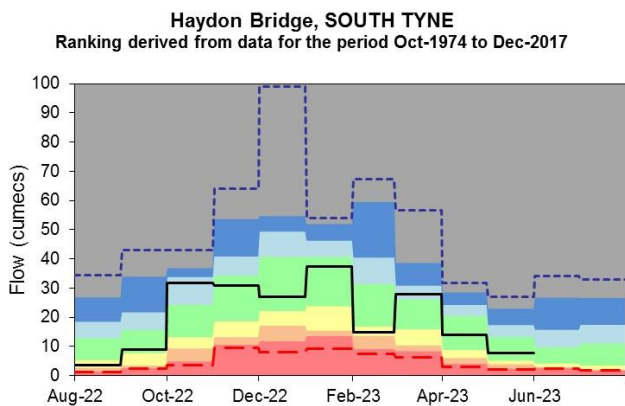
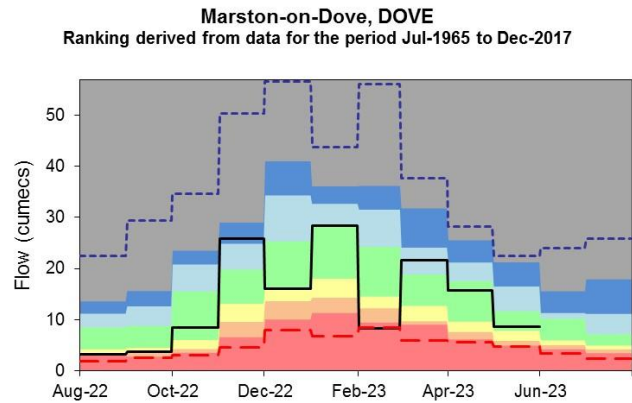
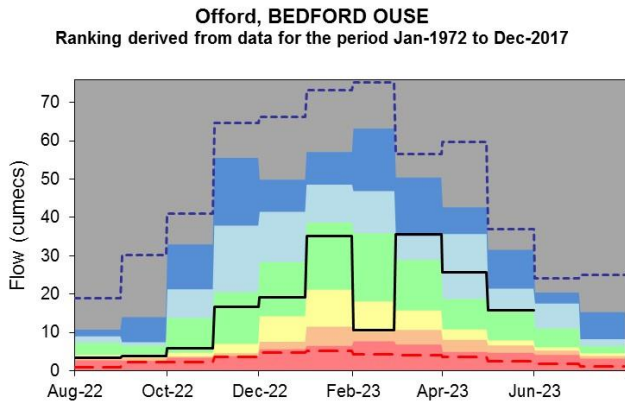
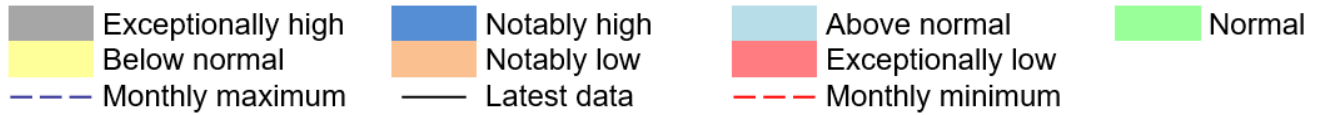
Naturalised flows are provided for the River Thames and the River Lee. +/- Monthly mean flow is the highest/lowest on record for the current month (note that record length varies between sites). * Flows may be overestimated at these sites – data should be treated with caution. # Flows may be impacted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



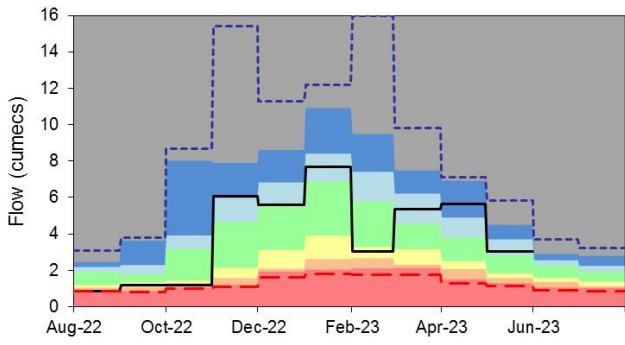
(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2023.

4.2 River flow charts

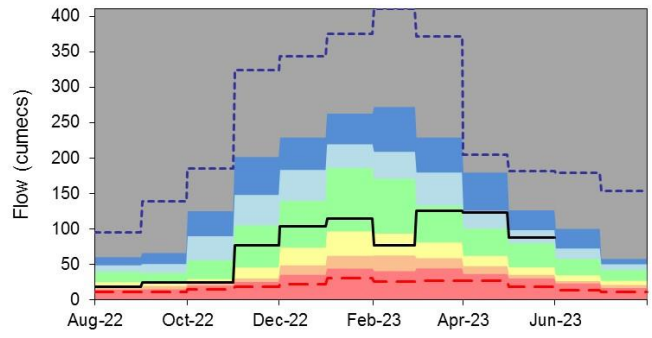
Figure 4.2: Monthly mean river flow for index sites over the past year for each geographic region, compared to an analysis of historic monthly mean flows, and long term maximum and minimum flows.



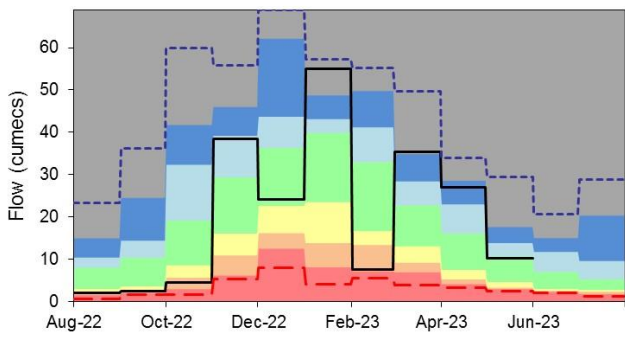
Horton, GREAT STOUR
Ranking derived from data for the period Oct-1964 to Dec-2017



Kingston, THAMES (naturalised)
Ranking derived from data for the period Jan-1883 to Dec-2017



Thorverton, EXE
Ranking derived from data for the period Apr-1956 to Dec-2017



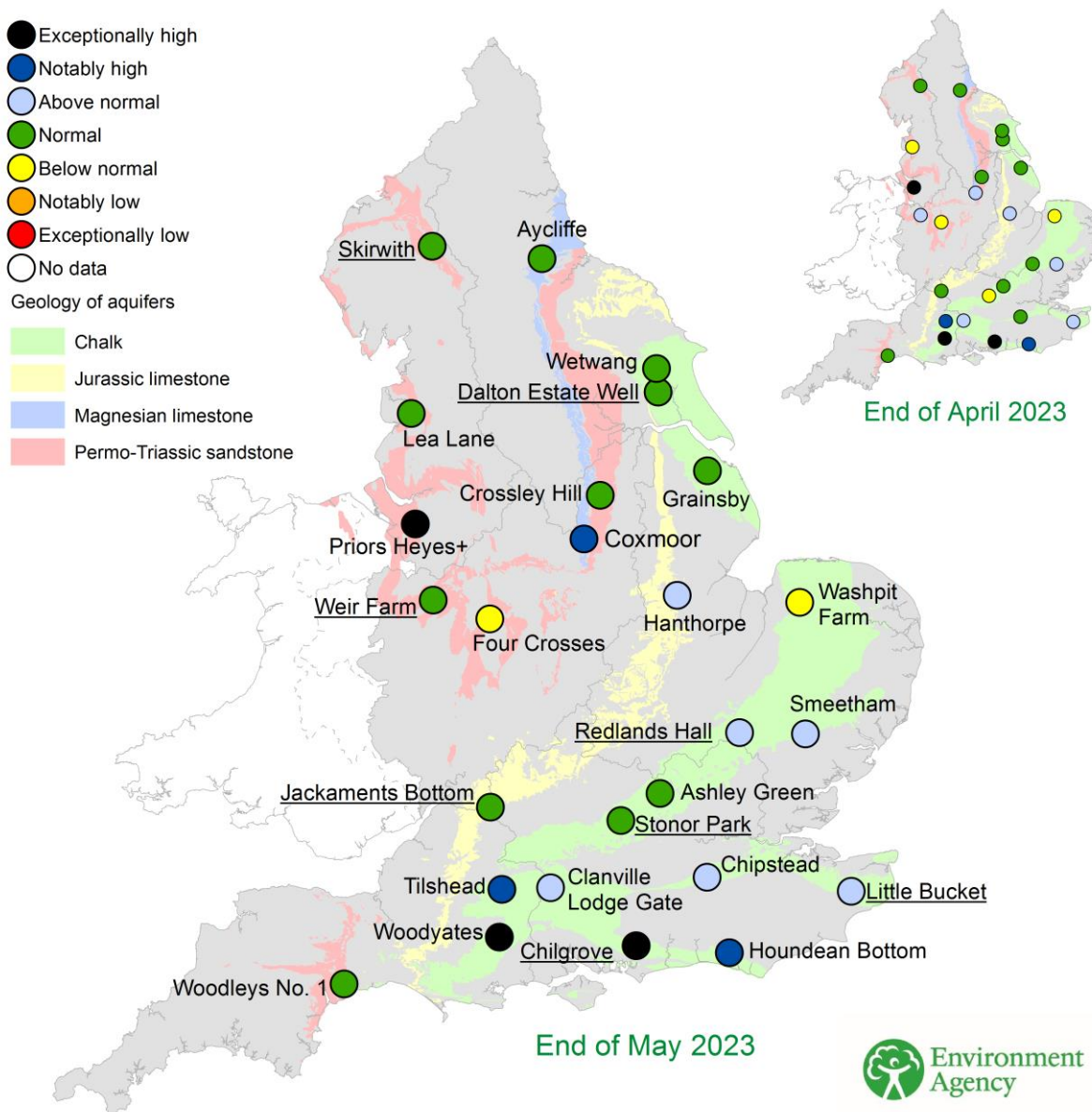
(Source: Environment Agency).

5 Groundwater levels

5.1 Groundwater levels map

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

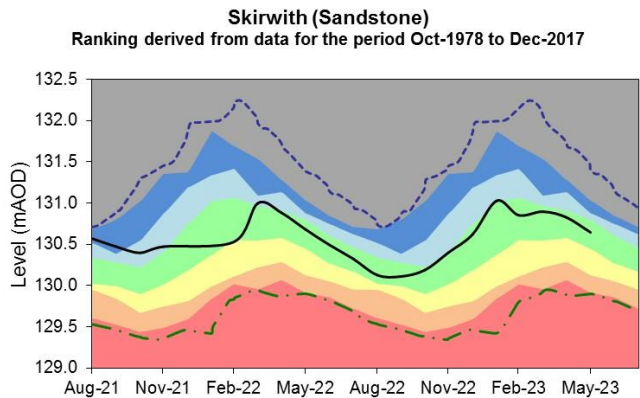
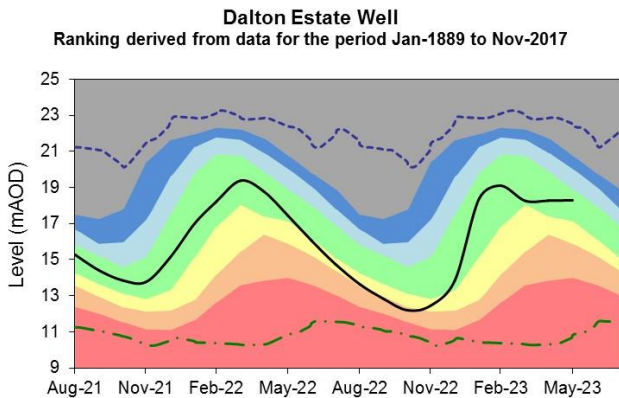
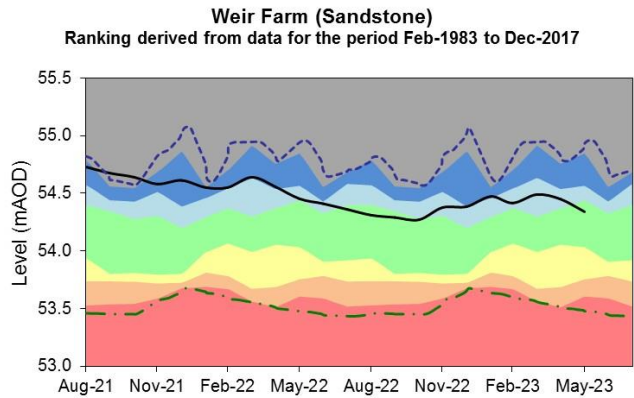
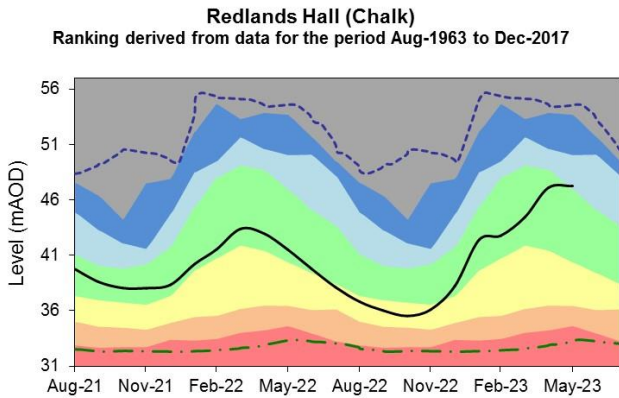
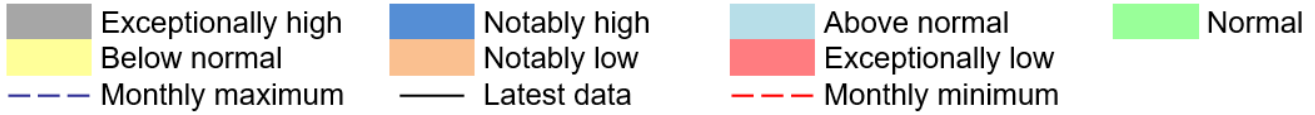
Redlands Hall and Aycliffe are manually dipped at different times during the month and so may not be fully representative of month end levels. Levels at Priors Heyes remain high compared to historic levels because the aquifer is recovering from the effects of historic abstraction. +/- End of month groundwater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



(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.

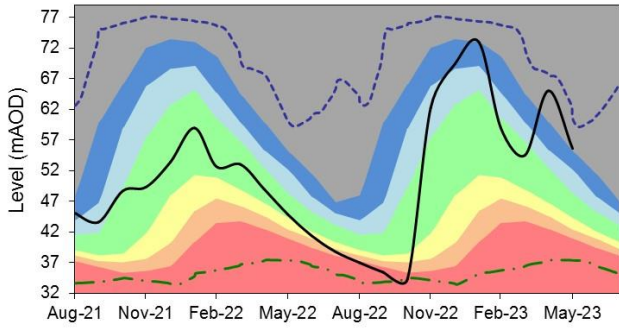
5.2 Groundwater level charts

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.



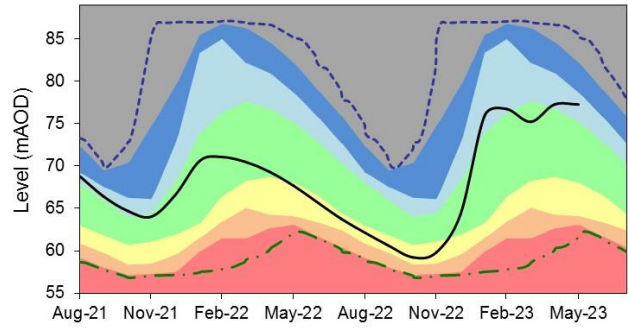
Chilgrove (Chalk)

Ranking derived from data for the period Feb-1836 to Dec-2017



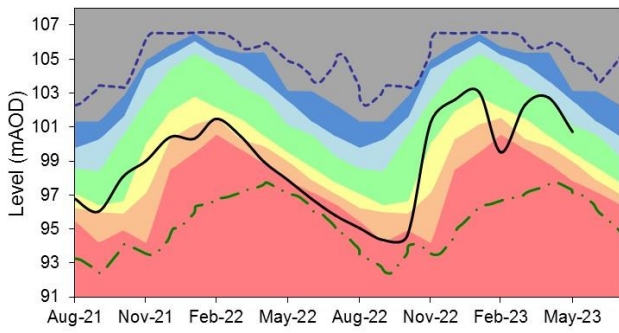
Little Bucket (Chalk)

Ranking derived from data for the period Jan-1971 to Dec-2017



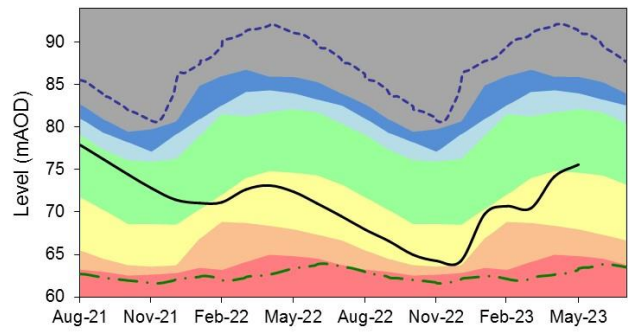
Jackaments Bottom (Jurassic Limestone)

Ranking derived from data for the period Jan-1974 to Dec-2017



Stonor Park (Chalk)

Ranking derived from data for the period May-1961 to Dec-2017

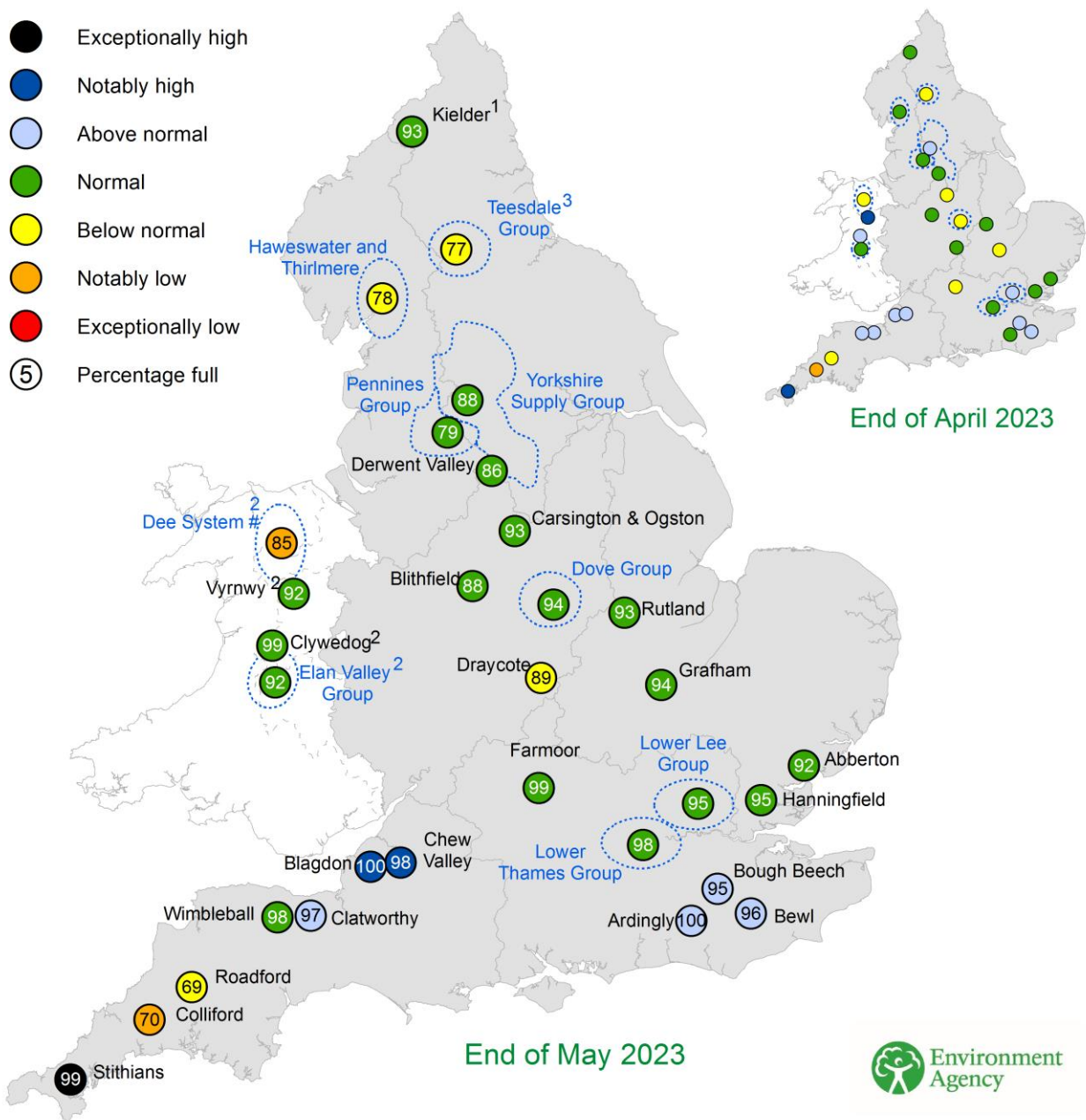


(Source: Environment Agency, 2023)

6 Reservoir storage

6.1 Reservoir storage map

Figure 6.1: Reservoir stocks at key individual and groups of reservoirs at the end of April 2023 and May 2023 as a percentage of total capacity and classed relative to an analysis of historic April and May 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.

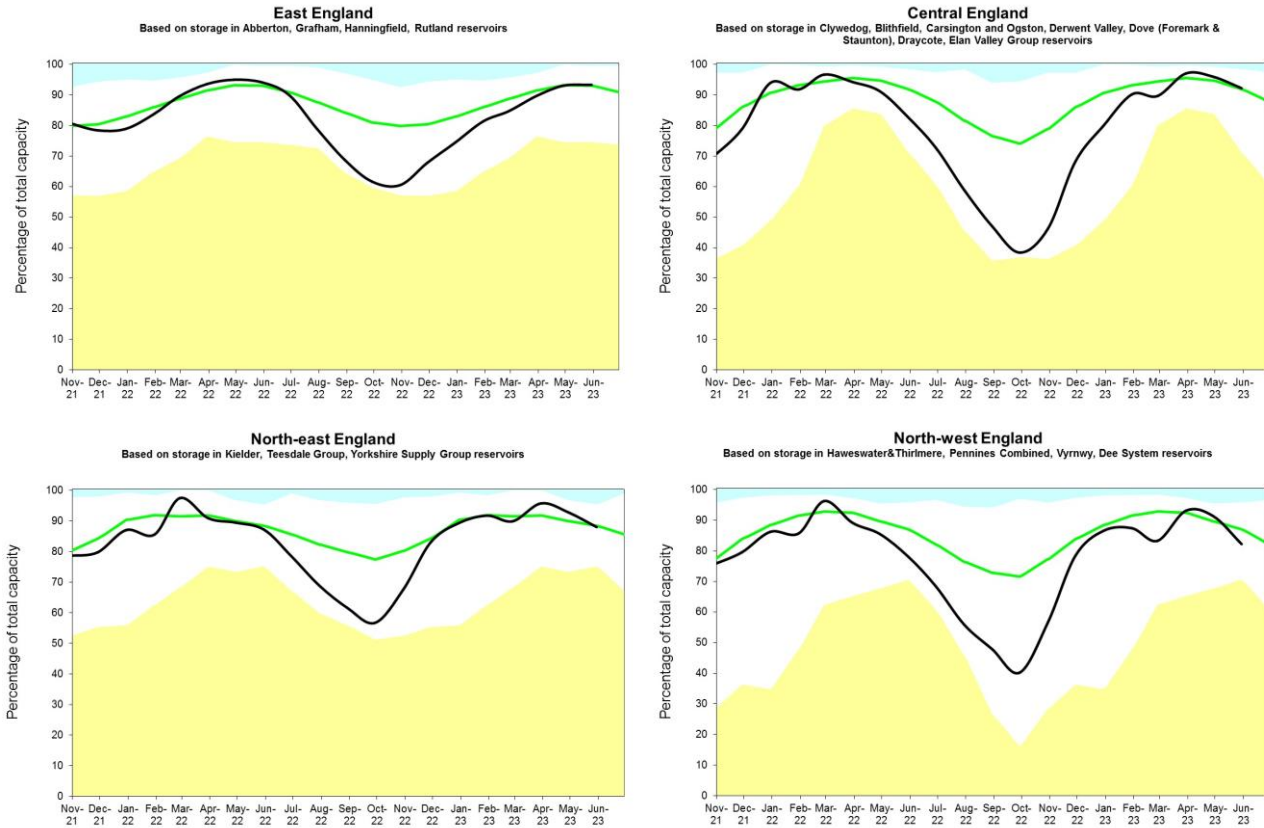


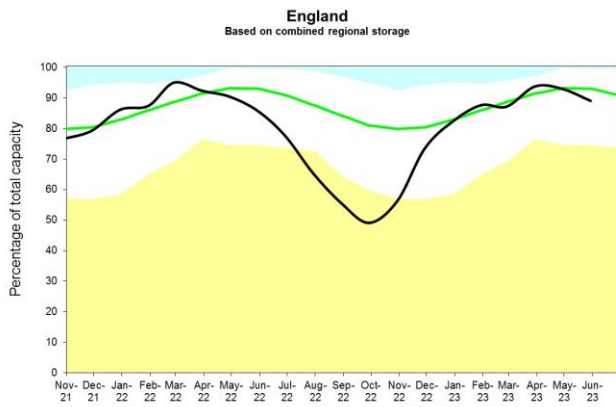
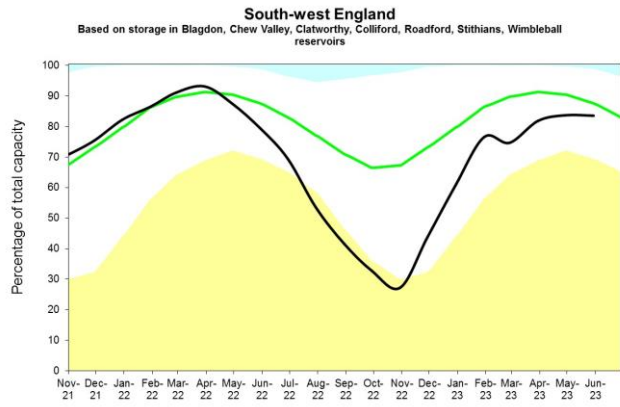
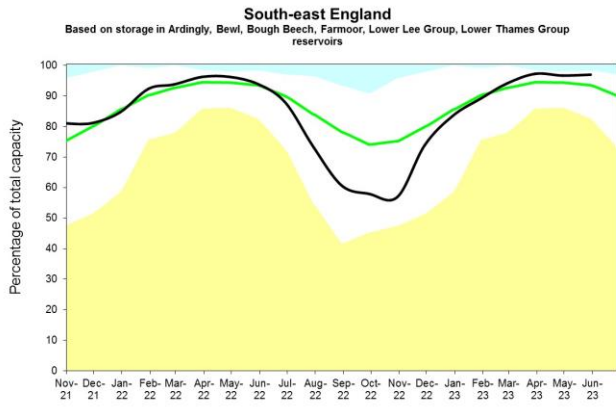
(Source: water companies). Crown copyright. All rights reserved. Environment Agency, 100024198, 2023

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.

	Below minimum monthly level		Above maximum monthly level		Average		Latest data
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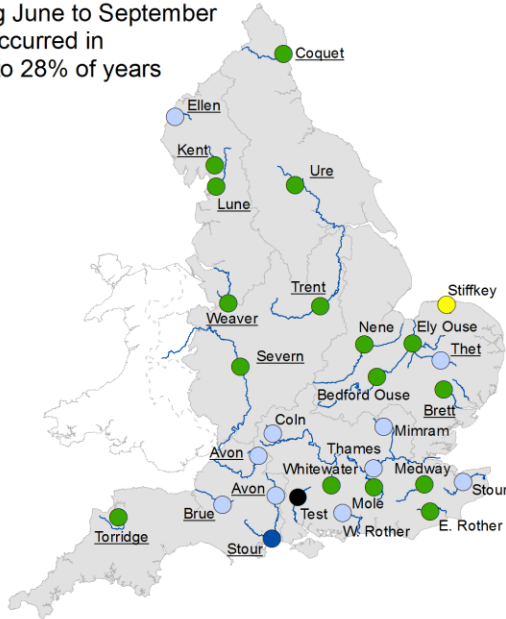
(Source: Water Companies).

7 Forward look

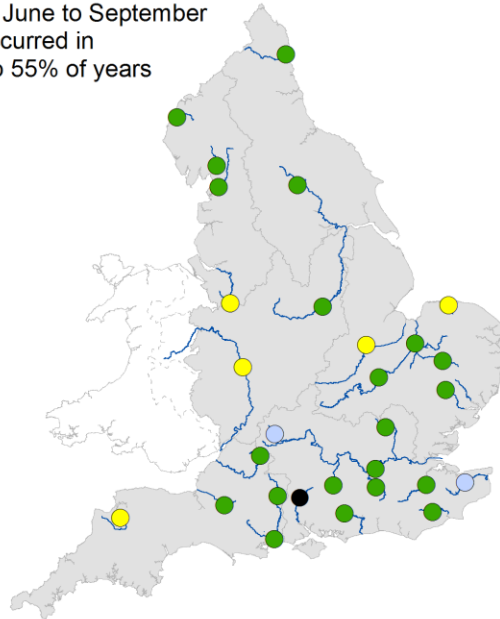
7.1 River flow

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

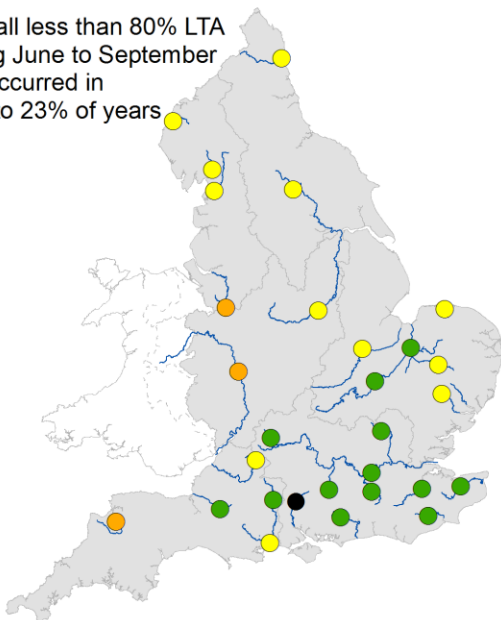
Rainfall greater than 120% LTA during June to September has occurred in 23% to 28% of years



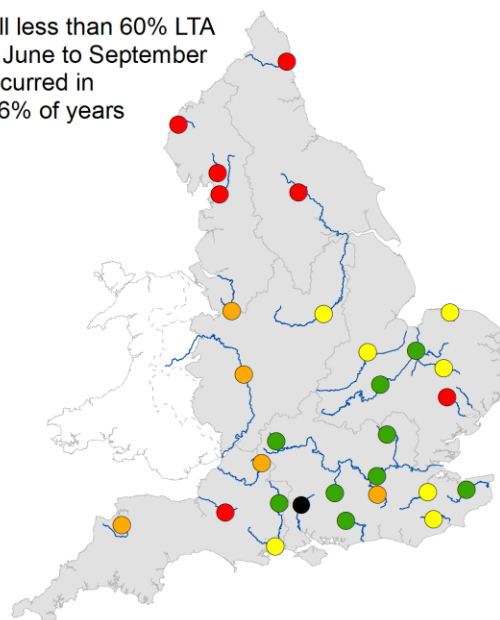
Rainfall greater than 100% LTA during June to September has occurred in 50% to 55% of years



Rainfall less than 80% LTA during June to September has occurred in 20% to 23% of years



Rainfall less than 60% LTA during June to September has occurred in 0% to 6% of years

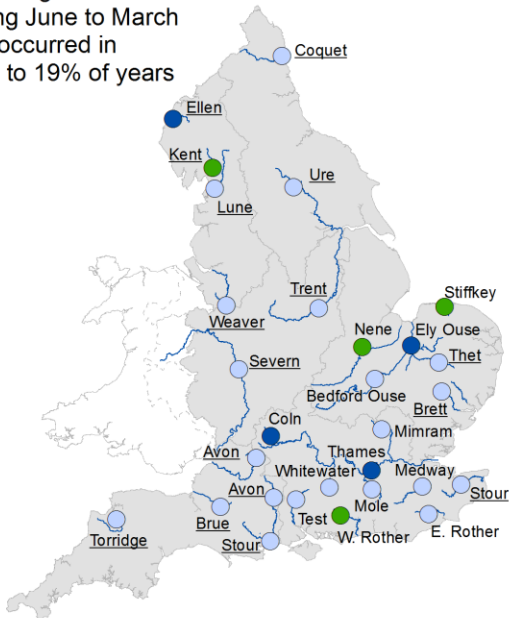


- Exceptionally high
- Above normal
- Below normal
- Exceptionally low
- Notably high
- Normal
- Notably low
- No data

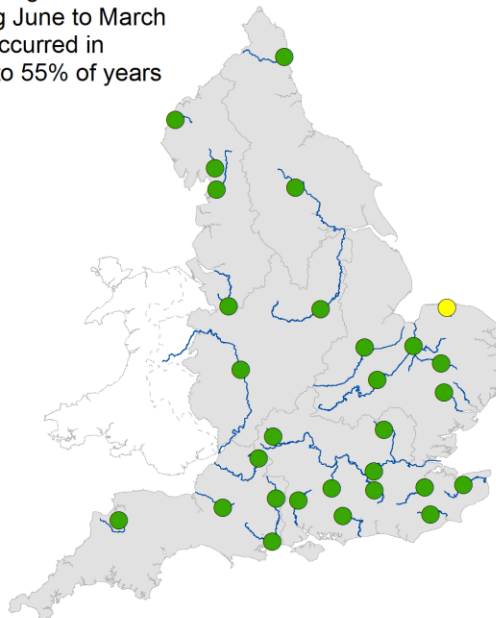
(Source: UK Centre for Ecology and Hydrology, Environment Agency).

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 June 2023 and March 2024. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by CEH.

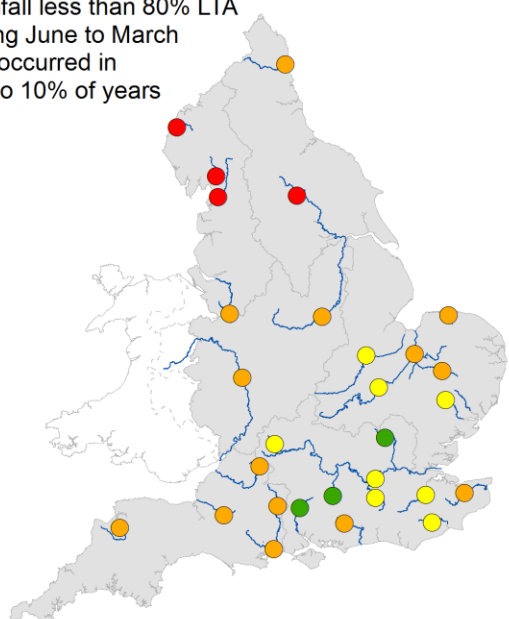
Rainfall greater than 120% LTA during June to March has occurred in 12% to 19% of years



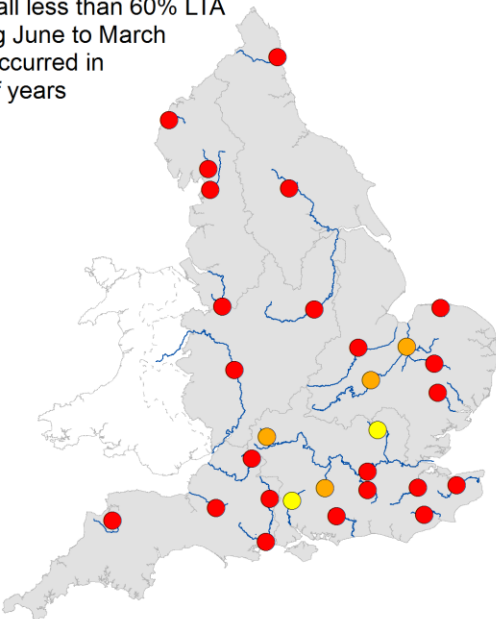
Rainfall greater than 100% LTA during June to March has occurred in 51% to 55% of years



Rainfall less than 80% LTA during June to March has occurred in 4% to 10% of years



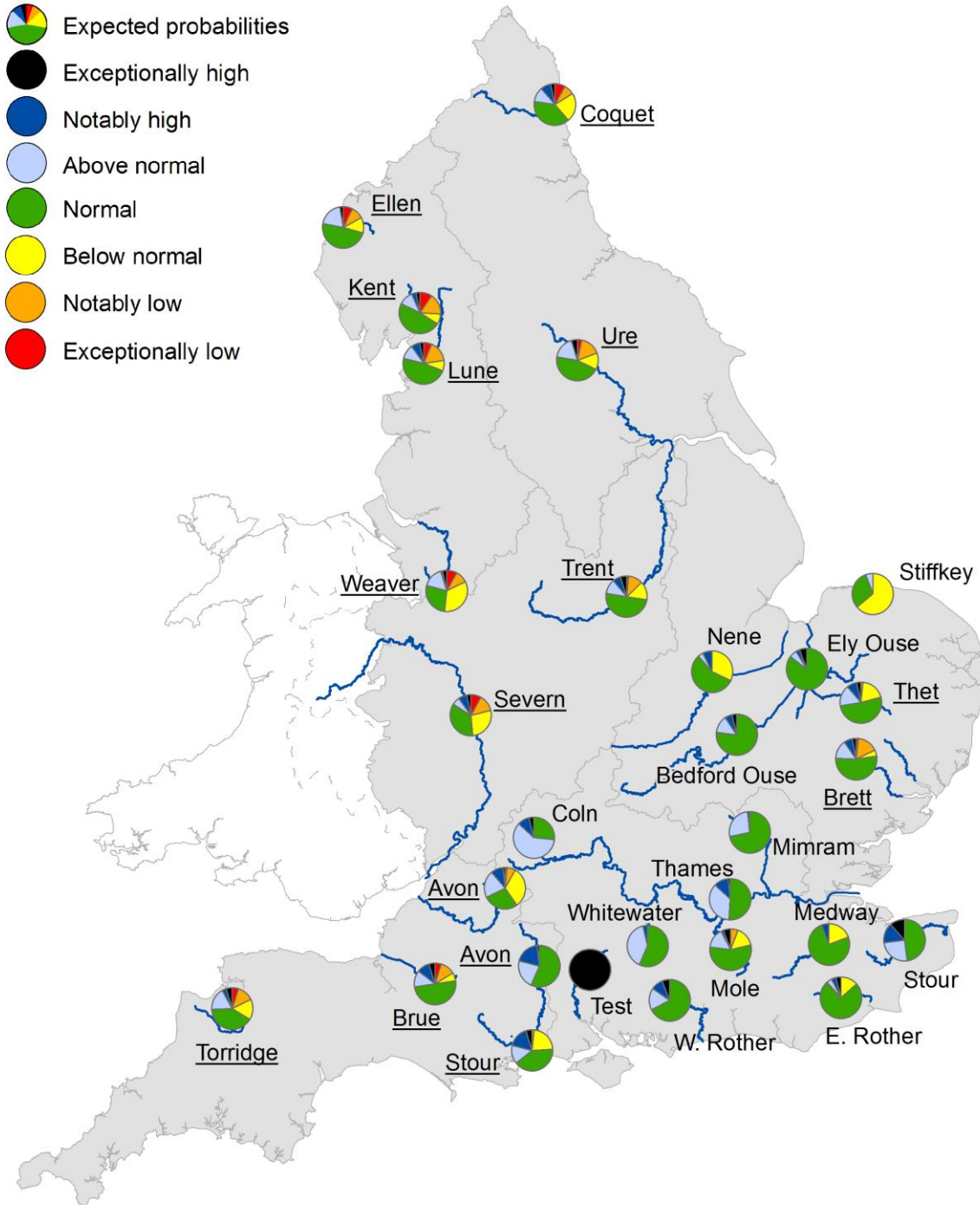
Rainfall less than 60% LTA during June to March has occurred in 0% of years



- Exceptionally high
- Above normal
- Below normal
- Exceptionally low
- Notably high
- Normal
- Notably low
- No data

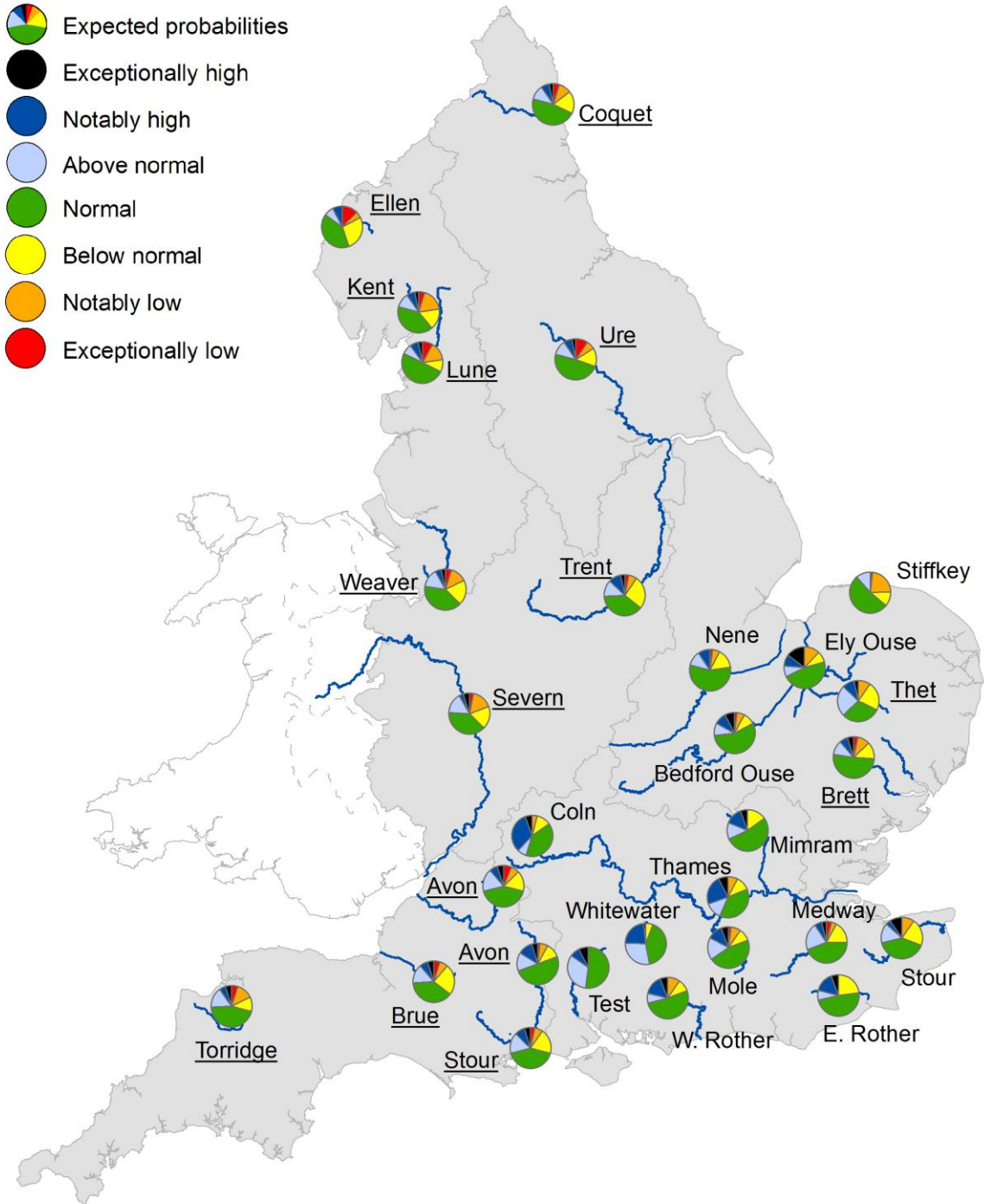
(Source: UK Centre for Ecology and Hydrology, Environment Agency)

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.

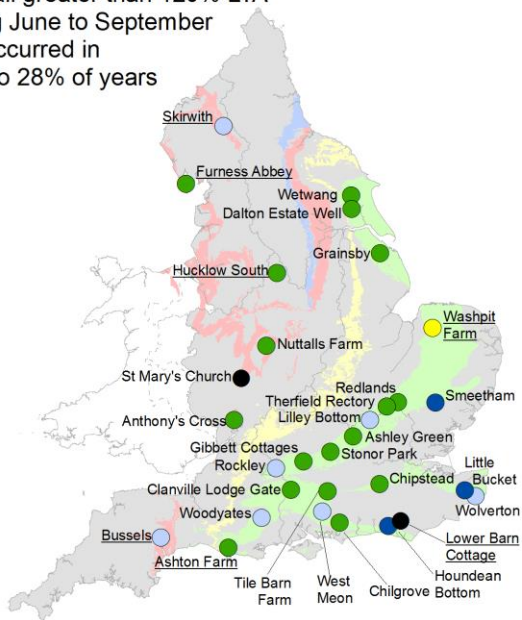


(Source: UK Centre for Ecology and Hydrology, Environment Agency).

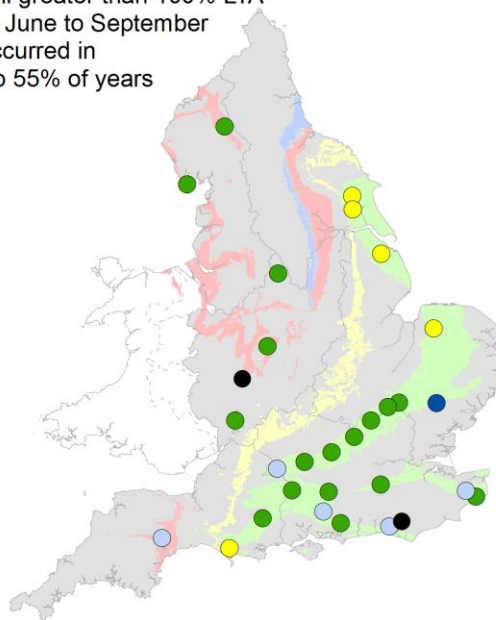
7.2 Groundwater

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

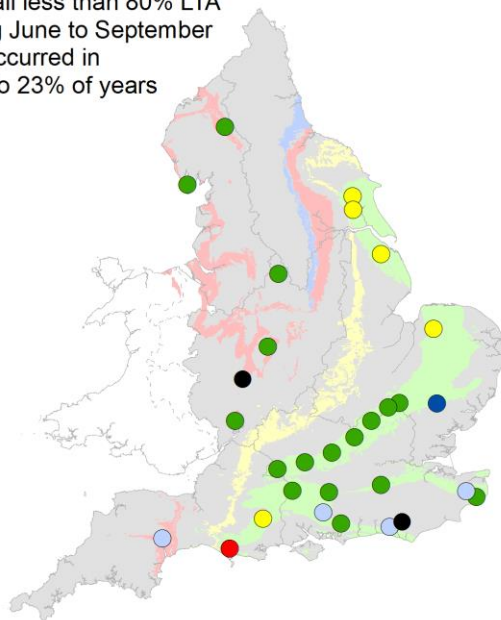
Rainfall greater than 120% LTA during June to September has occurred in 23% to 28% of years



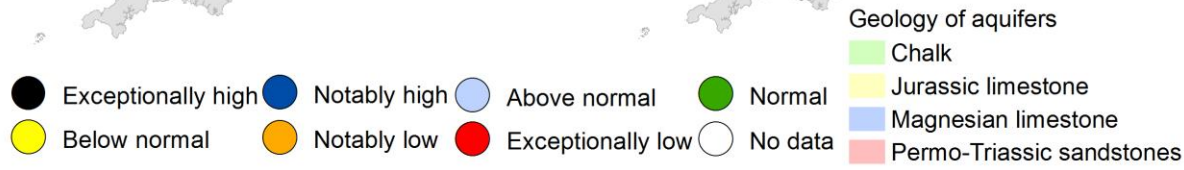
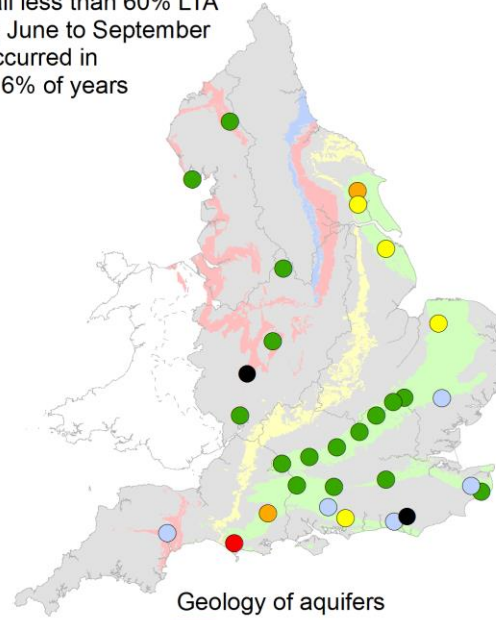
Rainfall greater than 100% LTA during June to September has occurred in 50% to 55% of years



Rainfall less than 80% LTA during June to September has occurred in 20% to 23% of years



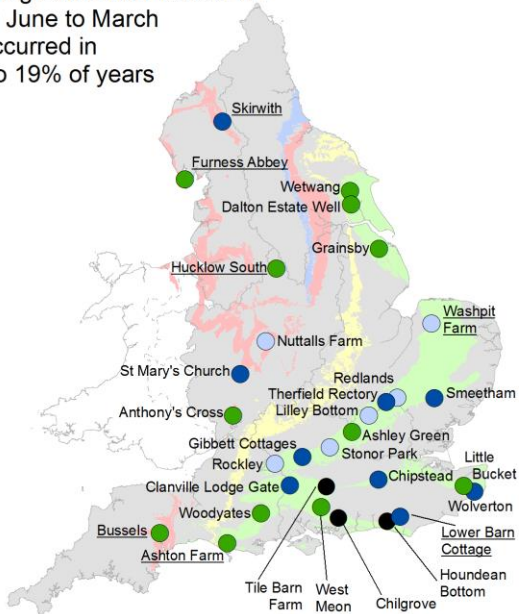
Rainfall less than 60% LTA during June to September has occurred in 0% to 6% of years



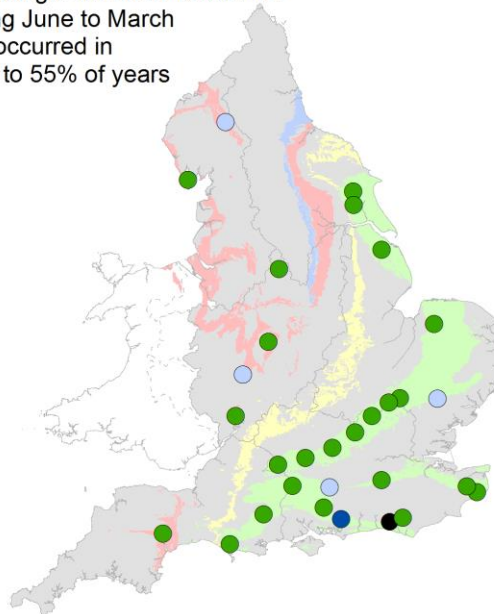
(Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum BGS © NERC. Crown copyright all rights reserved. Environment Agency 100024198, 2023.

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 June 2023 and March 2024. Rainfall statistics based on occurrence in the historic record since 1891. Projections for underlined sites produced by BGS.

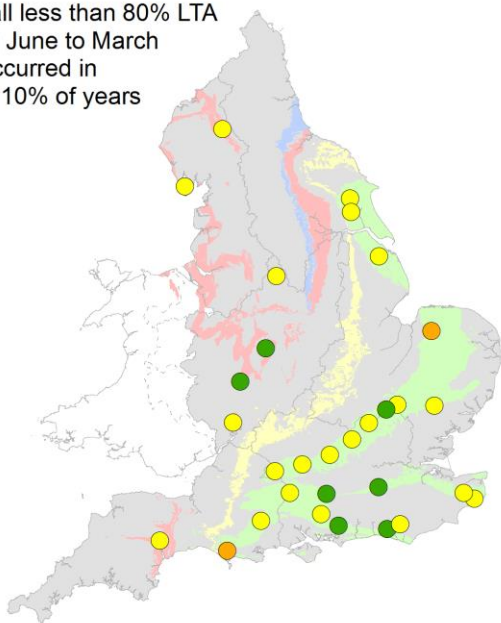
Rainfall greater than 120% LTA during June to March has occurred in 12% to 19% of years



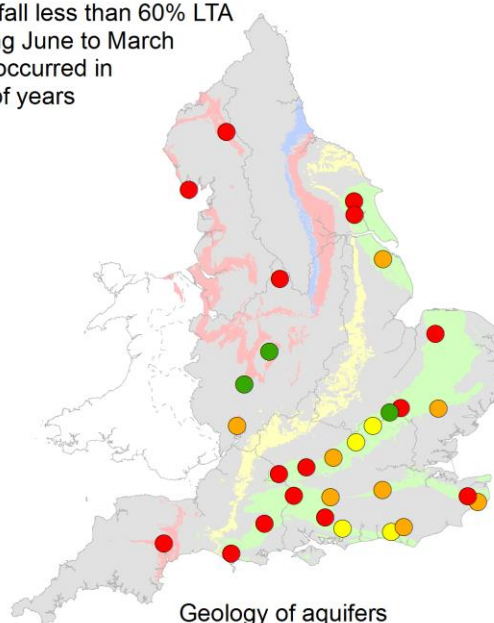
Rainfall greater than 100% LTA during June to March has occurred in 51% to 55% of years



Rainfall less than 80% LTA during June to March has occurred in 4% to 10% of years



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

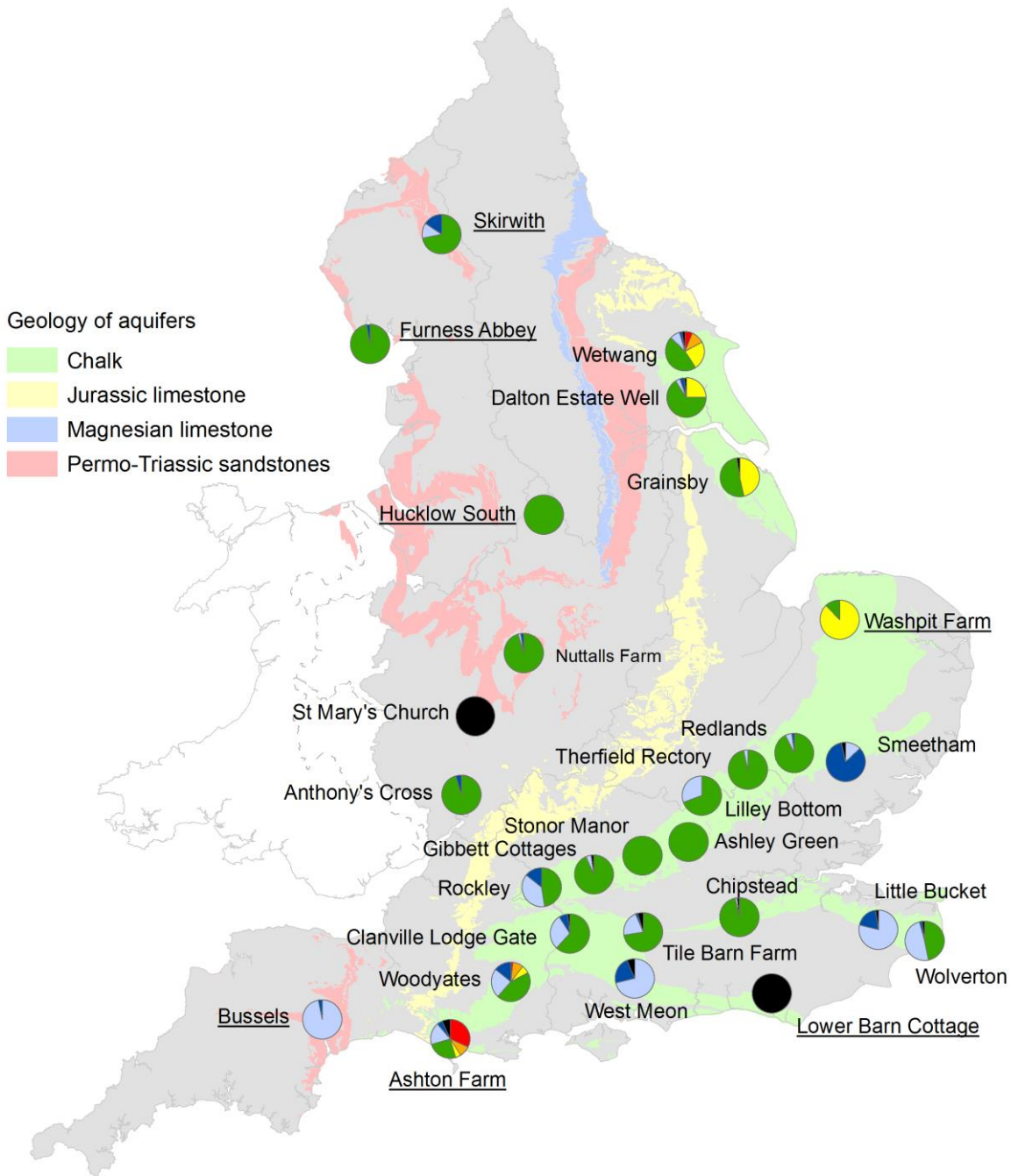


- Exceptionally high
- Notably high
- Above normal
- Normal
- Below normal
- Notably low
- Exceptionally low
- No data

- Geology of aquifers
- Chalk
 - Jurassic limestone
 - Magnesian limestone
 - Permo-Triassic sandstones

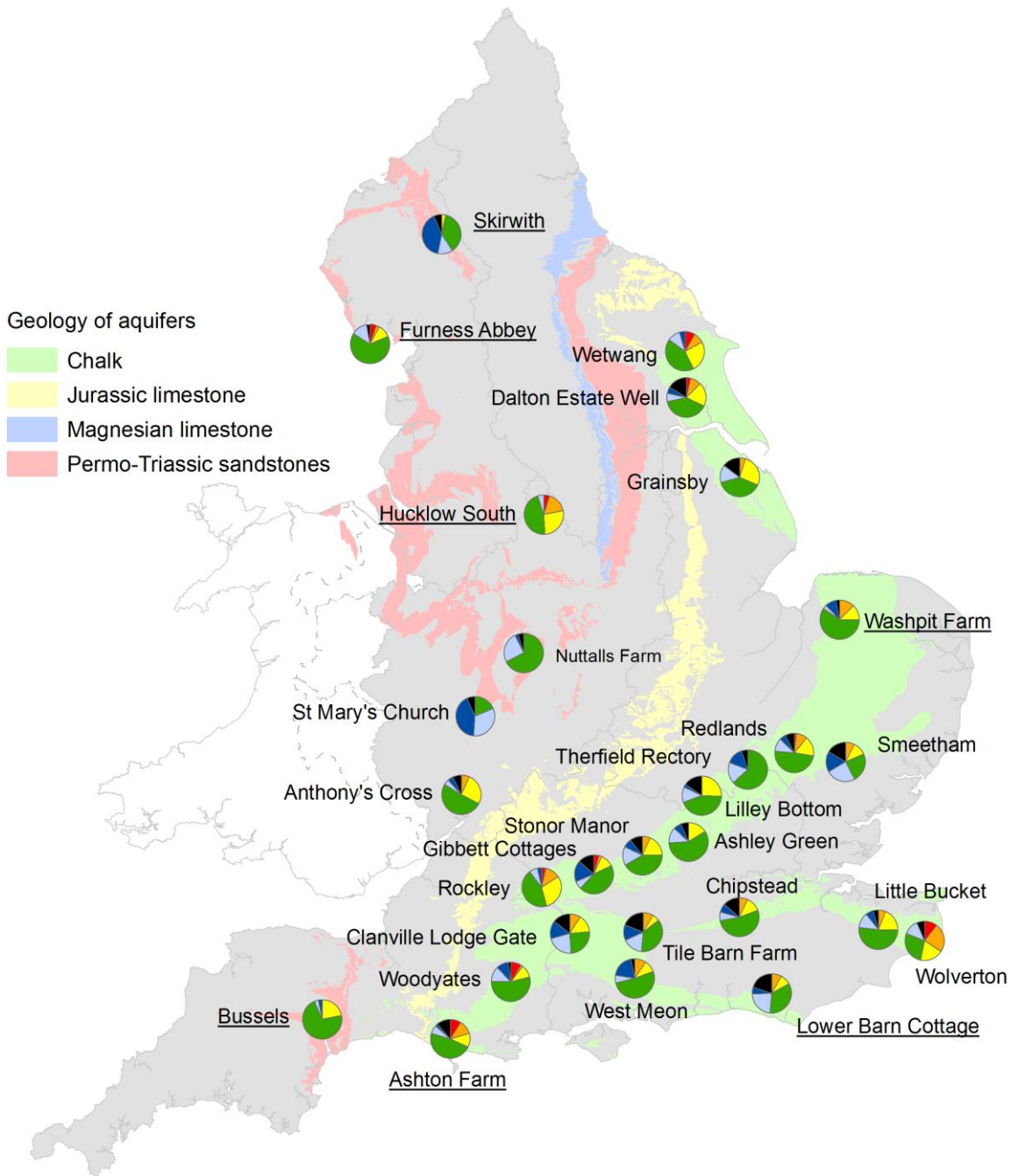
(Source: Environment Agency) Geological map reproduced with kind permission from UK Groundwater Forum BGS © NERC Crown copyright. All rights reserved. Environment Agency 100024198 2023.

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.



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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



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9 Appendices

9.1 Rainfall table

Region	May 2023 rainfall % of long term average 1961 to 1990	May 2023 band	Mar 2023 to May 2023 cumulative band	Dec 2022 to May 2023 cumulative band	Jun 2022 to May 2023 cumulative band
East England	86	Normal	Notably high	Normal	Normal
Central England	58	Below Normal	Above normal	Normal	Normal
North-east England	48	Notably Low	Normal	Normal	Below normal
North-west England	43	Notably Low	Normal	Normal	Normal
South-east England	69	Normal	Notably high	Above normal	Above normal
South-west England	83	Normal	Exceptionally high	Above normal	Above normal
England	65	Below Normal	Notably high	Normal	Normal

9.2 River flows table

Geographic area	Site name	River	May 2023 band	Apr 2023 band
East	Burnham	Burn	Below normal	Below normal
East	Claypole	Upper Witham	Above normal	Above normal
East	Colney	Yare	Notably high	Normal
East	Denver	Ely Ouse	Above normal	Above normal
East	Dernford	Cam	Above normal	Above normal
East	Louth Weir	Lud	Normal	Normal
East	Offord	Bedford Ouse	Above normal	Above normal
East	Springfield	Chelmer	Above normal	Notably high
East	Stowmarket	Gipping	Normal	Above normal
East	Upton Mill	Nene	Normal	No data
Central	Bewdley	Severn	Below normal	Normal
Central	Derby St Marys	Derwent	Normal	Above normal
Central	Evesham	Avon	Above normal	Above normal
Central	Marston-on-dove	Dove	Normal	Normal
Central	North Muskham	Trent	Normal	Above normal
North East	Buttercrambe	Derwent	Normal	Normal

North East	Crakehill Topcliffe	Swale	Below normal	Normal
North East	Heaton Mill	Till	Below normal	Normal
North East	Doncaster	Don	Normal	Normal
North East	Haydon Bridge	South Tyne	Normal	Normal
North East	Tadcaster	Wharfe	Below normal	Normal
North East	Stanhope	Wear	Normal	Normal
North West	Ashton Weir	Mersey	Below normal	Normal
North West	Caton	Lune	Below normal	Normal
North West	Ouse Bridge	Derwent	Below normal	Normal
North West	Pooley Bridge	Eamont	Below normal	Above normal
North West	St Michaels	Wyre	Below normal	Normal
North West	Ashbrook	Weaver	Normal	Normal
South East	Allbrook + Highbridge	Itchen	Notably high	Exceptionally high
South East	Feildes Weir	Lee	Above normal	Notably high
South East	Hansteads	Ver	Above normal	Above normal
South East	Hawley	Darent	Above normal	Notably high
South East	Horton	Great Stour	Above normal	Notably high
South East	Kingston	Thames	Above normal	Above normal
South East	Lechlade	Leach	Above normal	Exceptionally high

South East	Teston + Farleigh	Medway	Above normal	Exceptionally high
South East	Marlborough	Kennet	Exceptionally high	Exceptionally high
South East	Udiam	Rother	Normal	Notably high
South East	Ardingley Gs	Ouse	Above normal	Exceptionally high
South East	Princes Marsh Gs	Rother	Notably high	Exceptionally high
South West	Amesbury	Upper Avon	Notably high	Notably high
South West	Bathford	Avon	Above normal	Exceptionally high
South West	Bishops Tull	Tone	Exceptionally high	Notably high
South West	East Stoke	Frome	Exceptionally high	Notably high
South West	Great Somerford	Avon	Above normal	Exceptionally high
South West	Gunnislake	Tamar	Above normal	Notably high
South West	Hammoon	Middle Stour	Notably high	Exceptionally high
South West	Knapp Mill	Avon	Above normal	Above normal
South West	Lovington	Upper Brue	Exceptionally high	Notably high
South West	Thorverton	Exe	Normal	Notably high
South West	Torrington	Torridge	Above normal	Above normal

South West	Truro	Kenwyn	Notably high	Notably high
South West	Austins Bridge	River Dart	Above normal	Notably high
EA Wales	Manley Hall	Dee	Normal	Normal
EA Wales	Redbrook	Wye	Normal	Above normal

9.3 Groundwater table

Geographic area	Site name	Aquifer	End of May 2023 band	End of Apr 2023 band
East	Grainsby	Grimsby Ancholme Louth Chalk	Normal	Normal
East	Redlands Hall (chalk)	Cam Chalk	Above normal	Normal
East	Hanthorpe	Cornbrash (South)	Above normal	Above normal
East	Smeetham Hall Cott.	North Essex Chalk	Above normal	Above normal
East	Washpit Farm Rougham	North West Norfolk Chalk	Below normal	Below normal
Central	Four Crosses	Grimsby Ancholme Louth Limestone	Below normal	Below normal
Central	Weir Farm (sandstone)	Bridgnorth Sandstone Formation	Normal	Above normal
Central	Coxmoor	Permo Triassic Sandstone	Notably high	Above normal
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	Below normal
South East	Chilgrove (chalk)	Chichester- Worthing- Portsdown Chalk	Exceptionally high	Exceptionally high
South East	Clanville Gate Gwl	River Test Chalk	Above normal	Above normal
South East	Houndean Bottom Gwl	Brighton Chalk Block	Notably high	Notably high
South East	Little Bucket (chalk)	East Kent Chalk - Stour	Above normal	Above normal
South East	Jackaments Bottom (jurassic Limestone)	Burford Oolitic Limestone (Inferior)	Normal	Normal
South East	Ashley Green Stw Obh	Mid-Chilterns Chalk	Normal	Normal

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

9.4 Reservoir table

Geographic region	% Full	Average comparison
East England	93	Above average
Central England	92	Above average
North-east England	88	Below average
North-west England	82	Below average
South-east England	97	Above average
South-west England	84	Below average
England	89	Below average