Monthly water situation report: Midlands

1 Summary - September 2025

Please see Section 7.3 for a map detailing the Midlands regional coverage of this report.

Rainfall - In September, all Midlands hydrological catchments received more than 100% of their long term average (LTA) rainfall. The amount of rainfall received across the region ranged between normal to notably high compared to the LTA.

Soil moisture deficit - Soil moisture deficit (SMD) across the Midlands has decreased in September from the previous month, meaning soils have become wetter. By the end of the month, SMD was above average for the time of the year meaning soils have become drier.

River flows - In September, the majority of the sites recorded normal and above mean monthly flows. Two sites recorded below normal with one further site recording notably low mean monthly flows.

Groundwater levels - As of the end of September, all of the Midlands groundwater sites recorded normal or higher groundwater levels compared to the LTA with the exception of Southards Lane which recorded notably low.

Reservoir stocks - By the end of September, all but one of the reported Midlands reservoirs had below average storage compared to the LTA. Vrynwy recorded above average storage compared to the LTA.

1.1 Rainfall

In September, all Midlands hydrological catchments received more than 100% of their LTA rainfall. The wettest areas relative to their LTA were classified as having received notably high rainfall totals ranging between 172% to 198% of their typical totals. These were the Welsh Mountains, Shropshire Plains, Mid Severn/Teme, Dove and Derwent, with the Welsh Mountains recording its 9th wettest September rainfall since records began in 1871.

In addition, above normal rainfall was further recorded in the Lower Wye, Lower Severn, Upper Trent and the Lower Trent, with totals ranging from 136% to 156% of their LTA.

Although September in the Midlands has recorded a wetter month than the previous month, the Midlands' 7 month cumulative rainfall (March 2025 to September 2025) is still ranked 4th driest since records began in 1871.

Over the last 3 months, 6 of the hydrological catchments spread across the north of the Midlands, received normal rainfall totals ranging from 88% to 104% of their 3 month LTA. The

remaining 6 received below normal rainfall totals ranging from 68% to 82% of their 3 month LTA. These were Tame, Soar, Avon, Lower Severn, Lower Wye and Mid Severn/Teme.

During the last 6 months, all hydrological catchments in the Midlands, except for Welsh Mountains, had less than normal rainfall. These ranged between below normal and exceptionally low rainfall totals. The driest catchments, relative to their 6 month LTA, occurred in the southern half of the region. These were classed as having received exceptionally low rainfall totals ranging between 56% and 66% of their 6 month LTA. In addition, two hydrological catchments received notably low rainfall totals, these were Mid Severn/Teme and Lower Trent. Those areas classified as having received below normal rainfall totals, occurred in the Shropshire Plains, Upper Trent, Derwent and Dove. These areas ranged between 73% and 81% of their 6 month LTA.

Looking at the last 12 months rainfall totals combined, all hydrological catchments in the Midlands received below normal or notably low rainfall totals. The driest catchments were the Avon, Tame, Soar and Lower Trent, which were all classified as notably low having received between 76% to 81% of their LTA. All other catchments recorded below normal rainfall totals respective to their LTA.

1.2 Soil moisture deficit and recharge

SMD across the Midlands in September has decreased since last month, meaning that soils have become wetter. The majority of the hydrological catchments recorded a SMD value of 71mm to 100mm. The Avon and the Soar recorded the driest soils for September in the Midlands, receiving SMD values between 101mm and 130mm. Derwent, Dove and Shropshire Plains recorded SMD values between 41mm and 70mm, and the Welsh Mountains recording a SMD value between 11mm to 40mm.

1.3 River flows

In September, the majority of the sites in the Midlands recorded normal monthly mean flows ranging from 39% to 111% of their LTA. Three sites, scattered across the west of the Midlands, recorded above normal monthly mean flows. These occurred within the Severn and were Llanyblodwel, Bewdley and Deerhurst ranging between 127% and 165% of their LTA. Two sites, Derby St Marys in the north-east and Butts Bridge in the west, received below normal monthly mean flows. Ebley Mill in the south recorded notably low monthly mean flow.

Wedderburn Bridge has been showing unreliable data from September 2024 onwards, therefore, data has been removed from this report. Due to current issues with recording at low flows affecting Deerhurst, data for Haw Bridge was used in place of Deerhurst.

1.4 Groundwater levels

At the end of September, all sites except Southards Lane recorded normal or higher groundwater levels compared to their LTA. Southards Lane in the north-east recorded notably low groundwater levels. Weir Farm in the west and Crossley Hill in the north-east, both located on Sandstone geology, recorded above normal groundwater levels relative to their LTA. Coxmoor in the north-east recorded notably high. The remaining 5 sites all recorded normal groundwater levels.

1.5 Reservoir stocks

By the end of September all the reported Midlands reservoirs, with the exception of Vyrnwy, had below average storage compared to the LTA. They ranged between 24% at Charnwood and 74% at Clywedog. Vyrnwy, which had above average storage, was at 93%.

1.6 Environmental impact

Both the West Midlands and East Midlands areas moved into drought incident status on 15 July 2025. We continue to work with water companies and other abstractors to manage water resources and take precautionary actions. A number of low flow alleviation schemes are also active across the region.

1.7 River Severn operations

The River Severn is regulated to maintain a minimum flow at Bewdley gauging station. This ensures sufficient water flows along the river to support environmental and water supply requirements. Regulation is instigated when flows drop below a threshold. The 2025 regulation season has seen 86 days of river regulation, which commenced on 9 May 2025. The last day of regulation was 11 September 2025.

Table 1.1: River Severn operational releases

Water supply (Ml/d)	Total releases	Normal releases	Regulation releases	Flood drawdown releases
Llyn Clywedog	18 Ml/d	18 Ml/d	18 Ml/d	0 Ml/d
Lake Vyrnwy	22 Ml/d	22 Ml/d	0 Ml/d	0 Ml/d

Water supply (Ml/d)	Total releases	Normal releases	Regulation releases	Flood drawdown releases
Shropshire Groundwater Scheme	0 Ml/d	N/A	0 Ml/d	N/A

1.8 River Wye operations

Following on from the previous month, River Wye Regulation continued throughout all of September. As of 22 September, storage in the Elan Valley reservoirs was above the release control line. For most of September, the flows at Redbrook gauging station were below the regulation threshold. However, between 15 September to 28 September, Redbrook gauging station was above the regulation threshold.

1.9 Water abstraction restrictions

As of the end of September, there are 74 water abstraction licence restrictions in place across the Midlands affecting 181 licences in total.

Please refer to the appendices for a full list of water abstraction licence restrictions.

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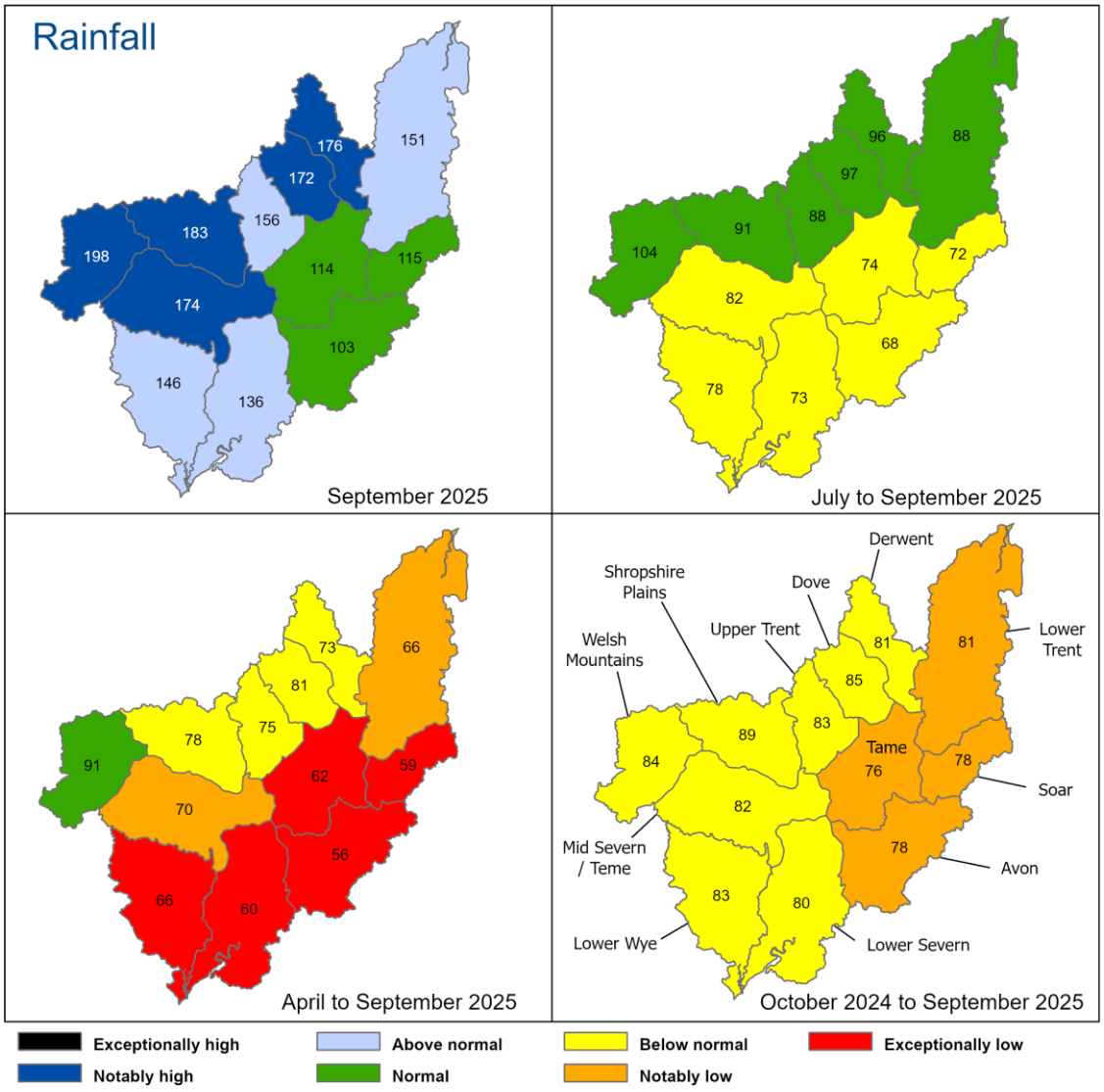
2 Rainfall

2.1 Rainfall map

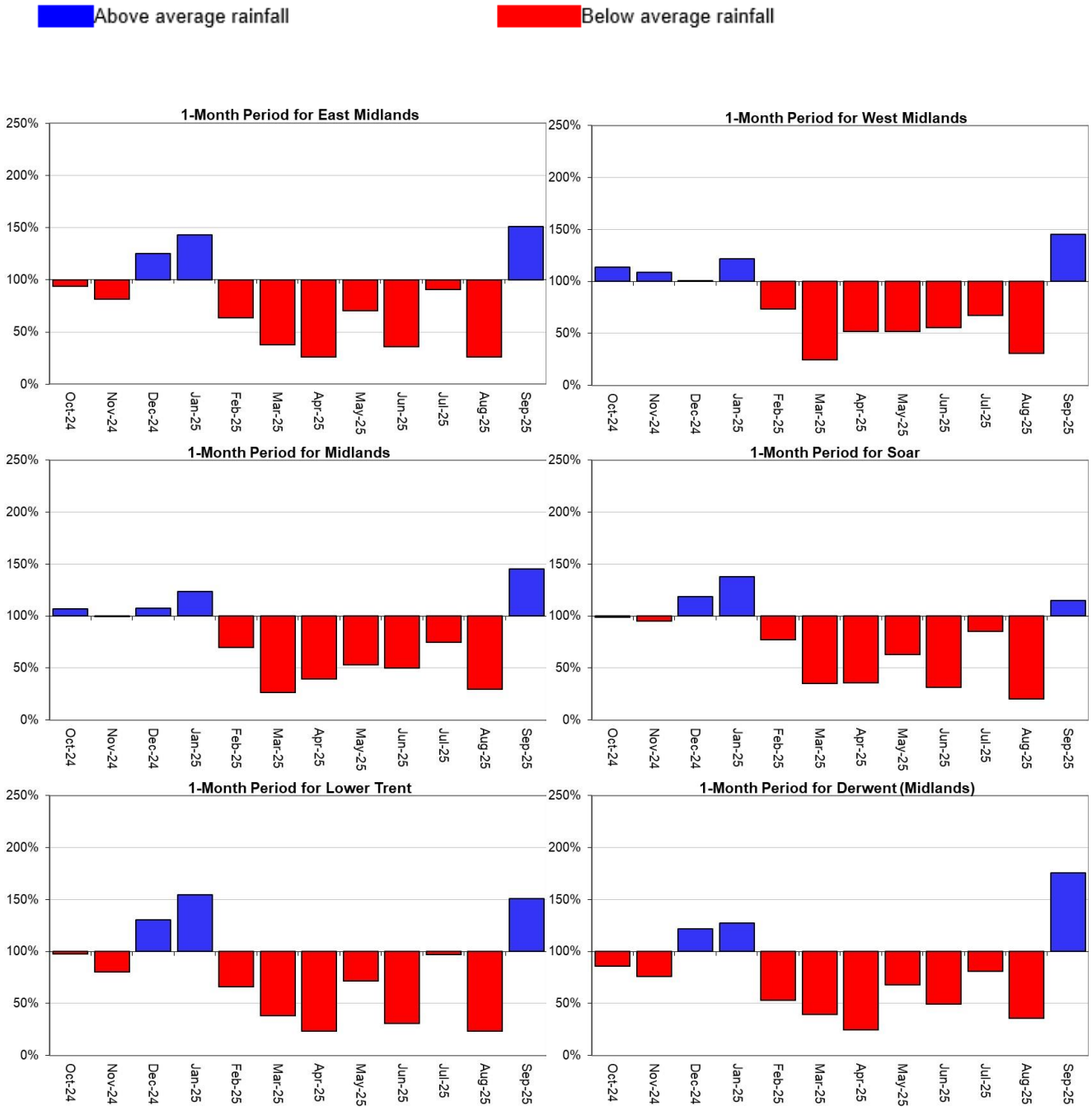
Figure 2.1: Rainfall as % LTA for hydrological areas for the current month (up to 30 September 2025), the last 3 months, the last 6 months, and the last 12 months, relative to an analysis of respective historic totals from 1991 to 2020. Table available in the appendices with detailed information.

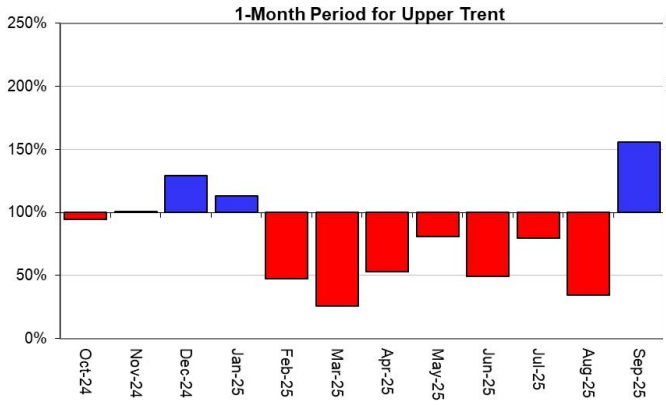


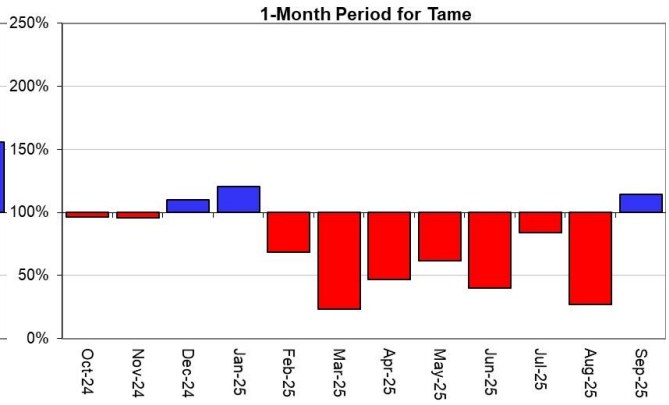
Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges (Source: Environment Agency. Crown Copyright, AC0000807064, 2025). HadUK data based on the Met Office 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

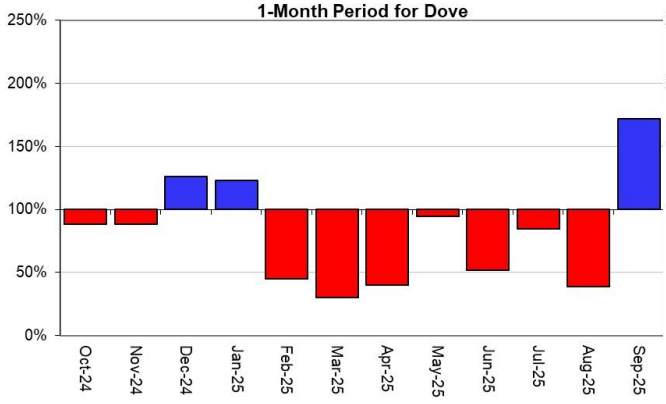
2.2 Rainfall charts

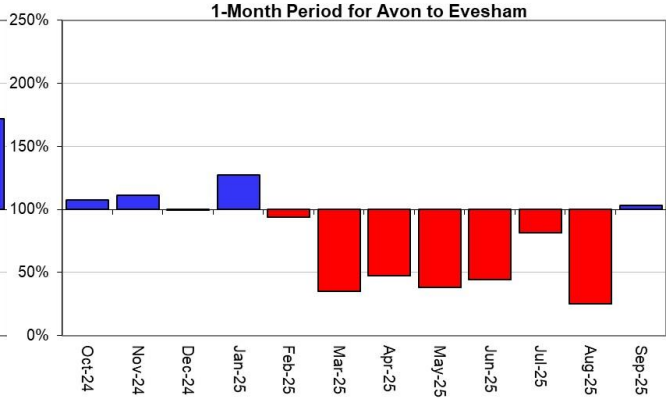
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for hydrological areas across the Midlands region.

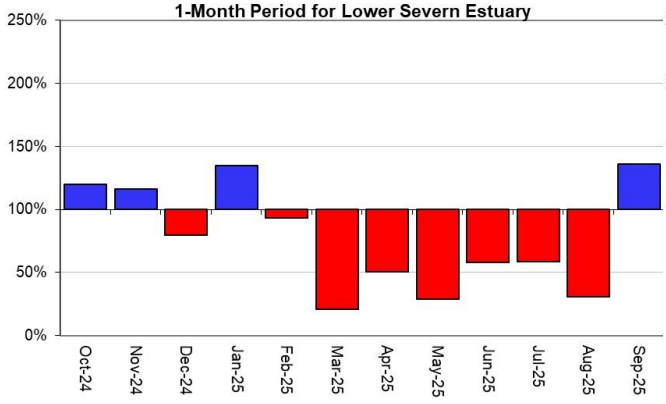


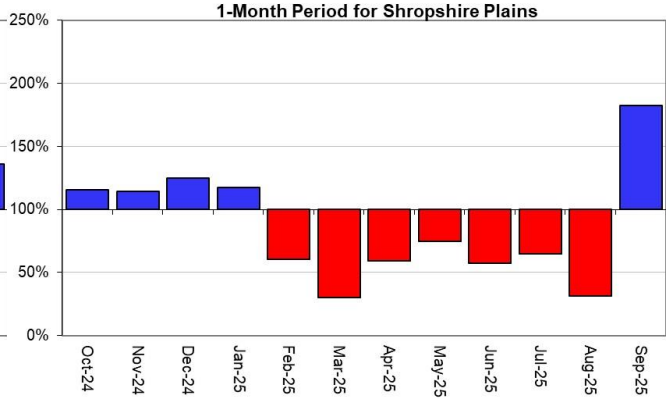

1-Month Period for Upper Trent
250%
200%
150%
100%
50%
0%
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25

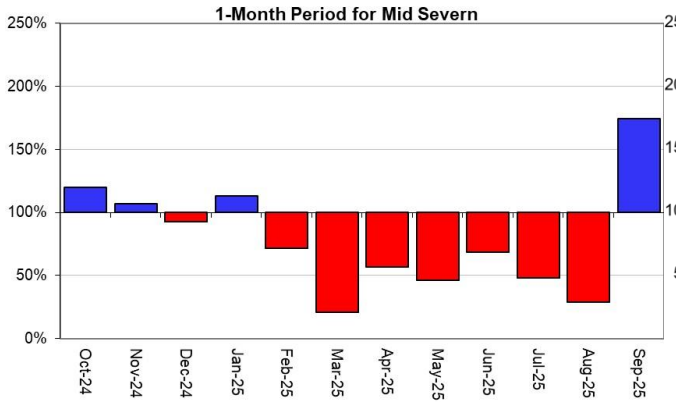

1-Month Period for Tame
250%
200%
150%
100%
50%
0%
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25

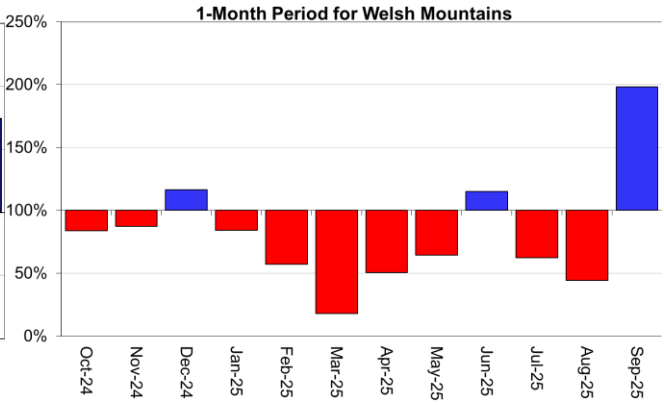

1-Month Period for Dove
250%
200%
150%
100%
50%
0%
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25

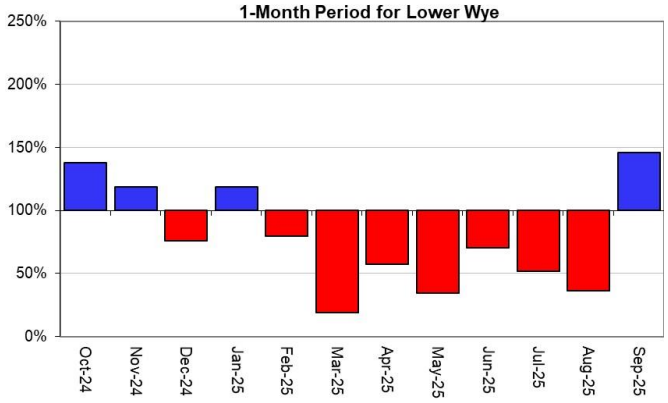

1-Month Period for Avon to Evesham
250%
200%
150%
100%
50%
0%
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25


1-Month Period for Lower Severn Estuary
250%
200%
150%
100%
50%
0%
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25


1-Month Period for Shropshire Plains
250%
200%
150%
100%
50%
0%
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25





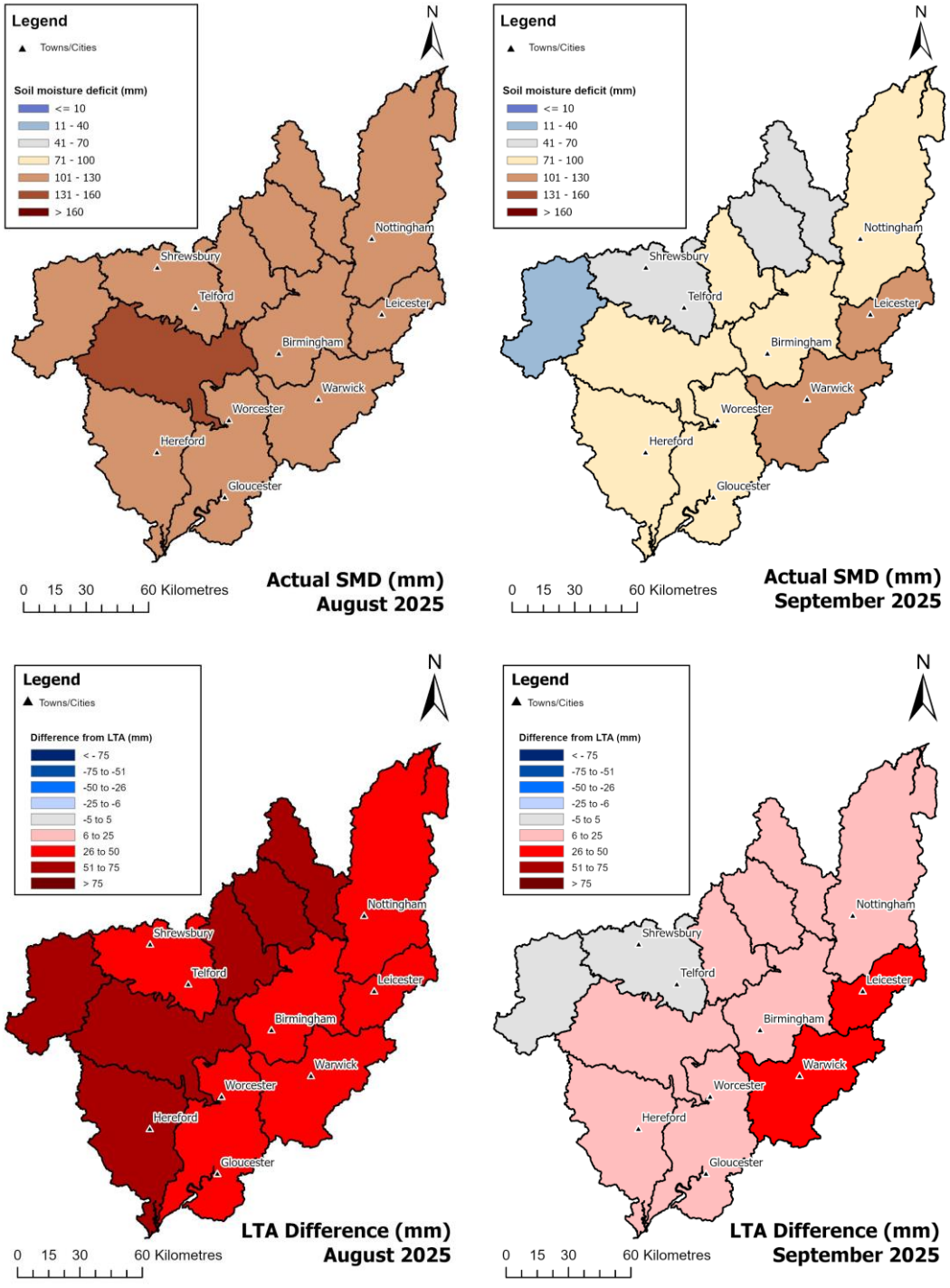


Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges (Source: Environment Agency. Crown Copyright, AC0000807064, 2025). HadUK data based on the Met Office 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

3 Soil moisture deficit

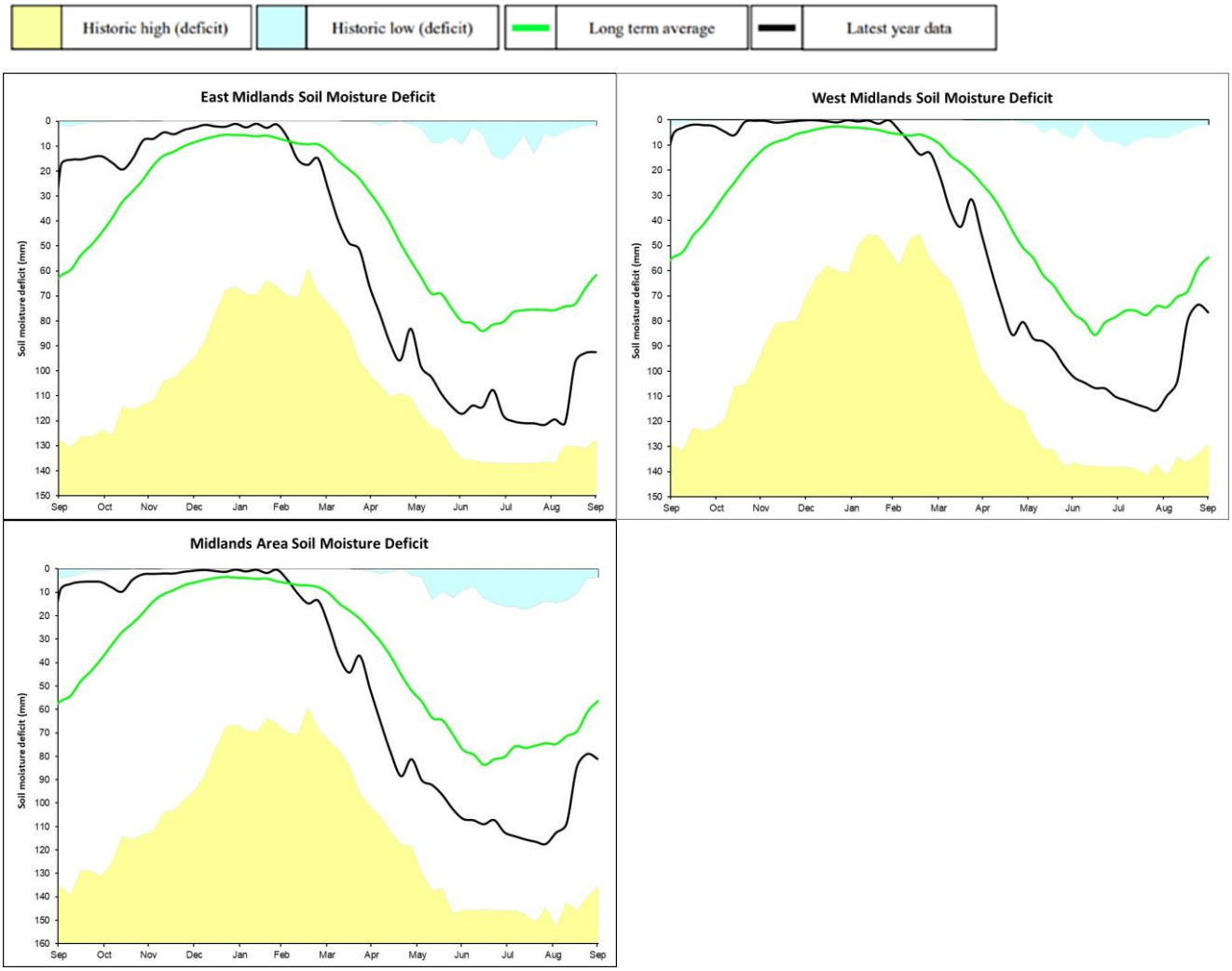
3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending 30 September 2025. Shows the difference (mm) of the actual soil moisture deficit from the 1991 to 2020 long term average soil moisture deficits. MORECS data for real land use.



3.2 Soil moisture deficit charts

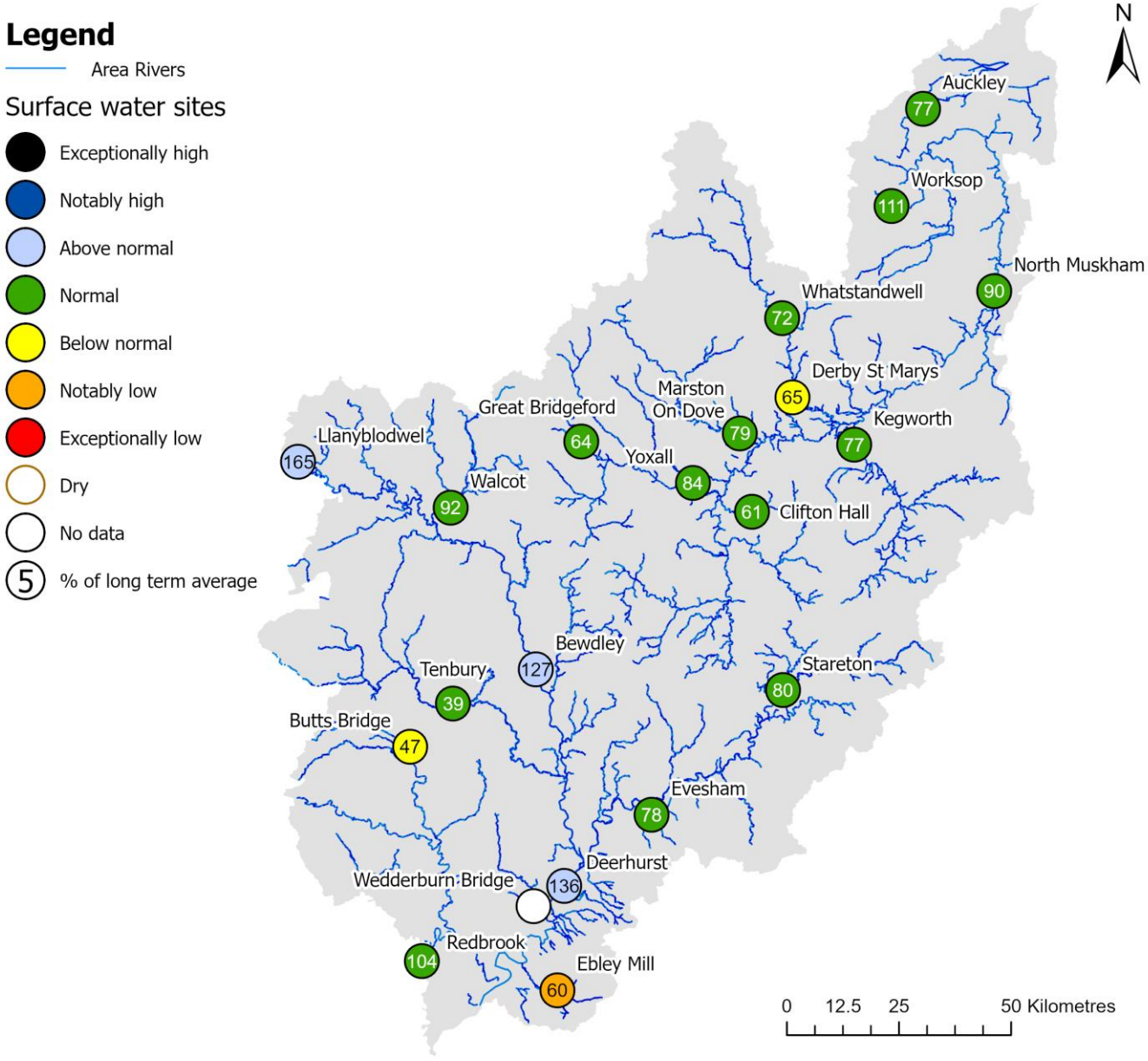
Figure 3.2: Latest soil moisture deficit charts for selected areas across the Midlands.



4 River flows

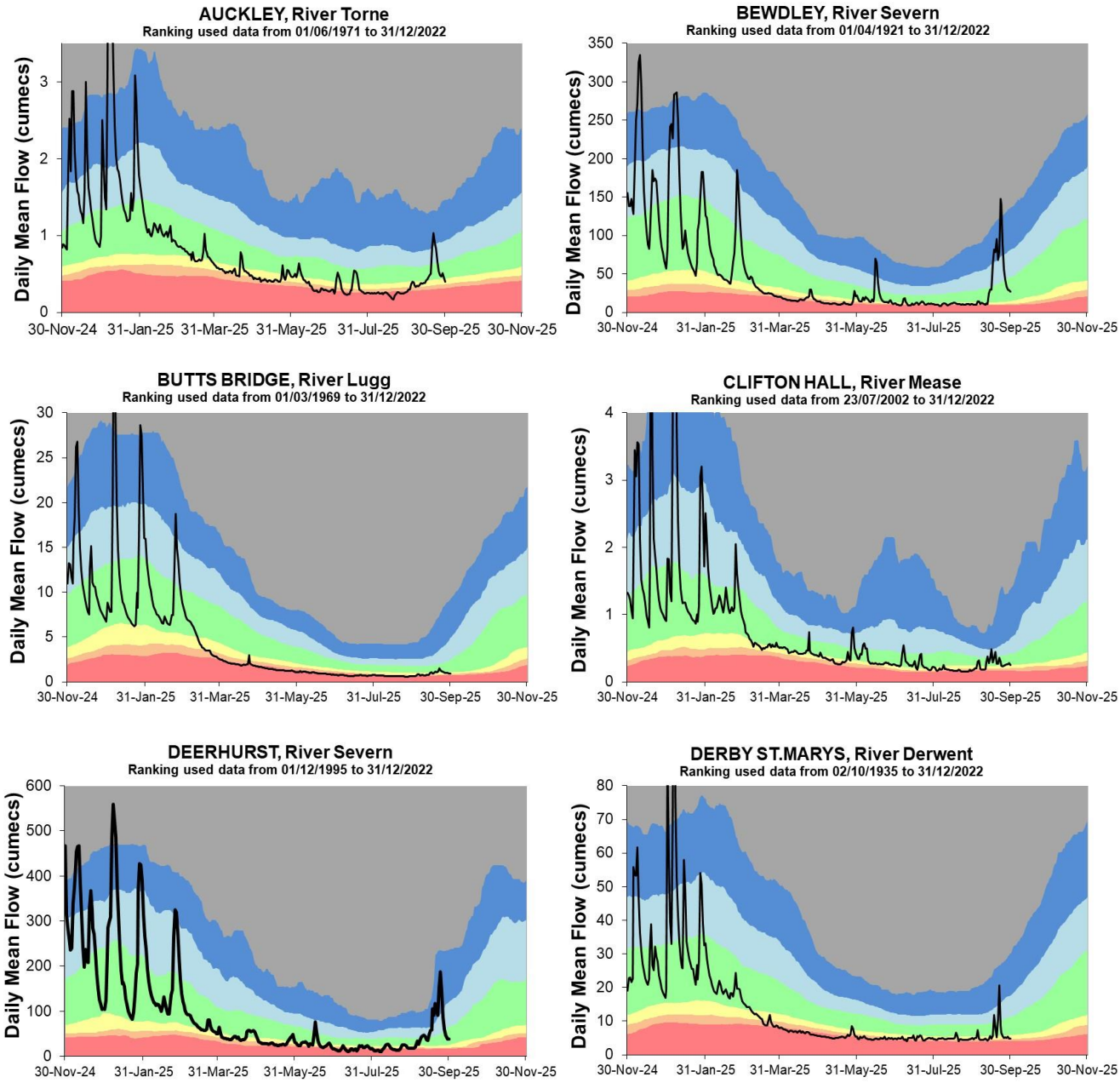
4.1 River flows map

Figure 4.1: Monthly mean river flow for indicator sites for September 2025, expressed as a percentage of the respective long term average and classed relative to an analysis of historic September monthly means. Table available in the appendices with detailed information.

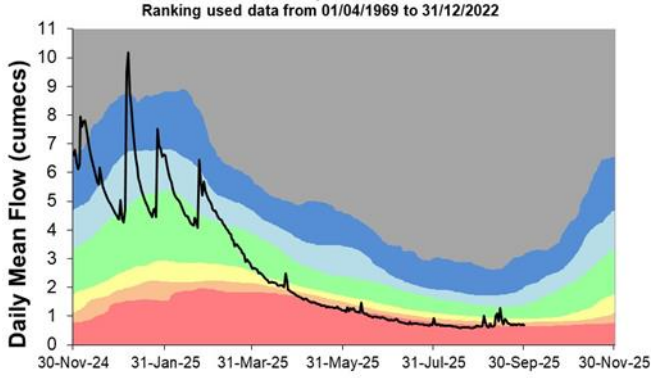


4.2 River flow charts

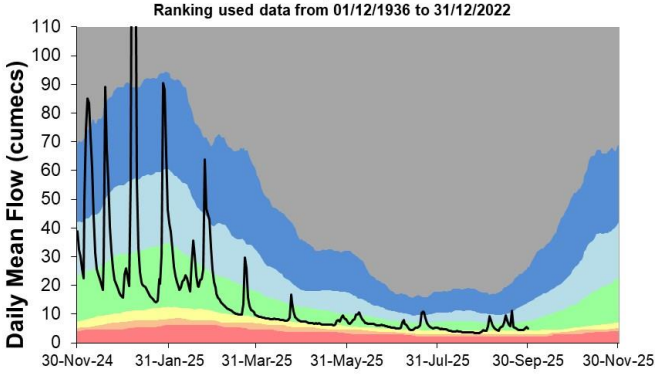
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



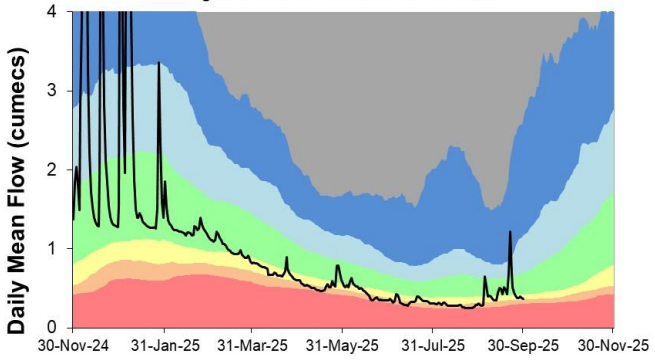
EBLEY MILL, River Frome
Ranking used data from 01/04/1969 to 31/12/2022



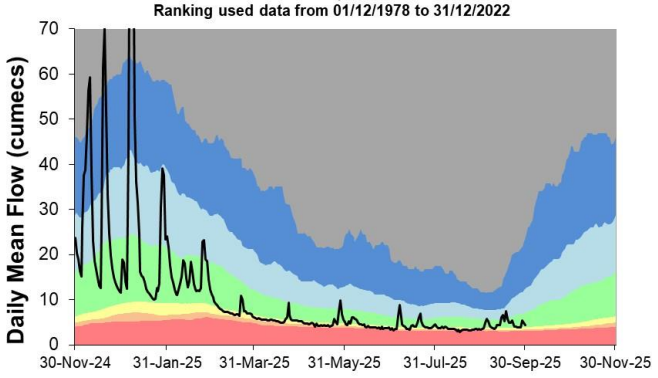
EVESHAM, River Avon
Ranking used data from 01/12/1936 to 31/12/2022



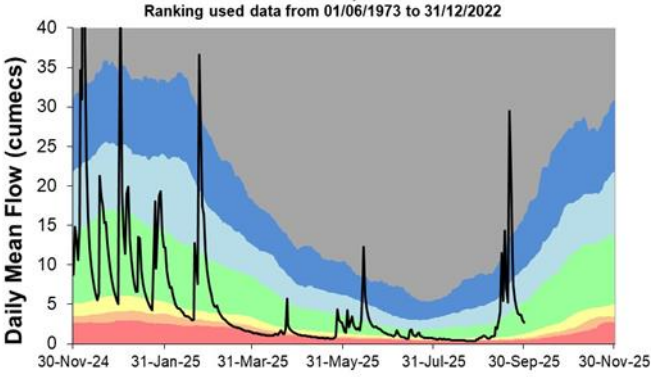
GREAT BRIDGFORD, River Sow
Ranking used data from 18/01/1971 to 31/12/2022



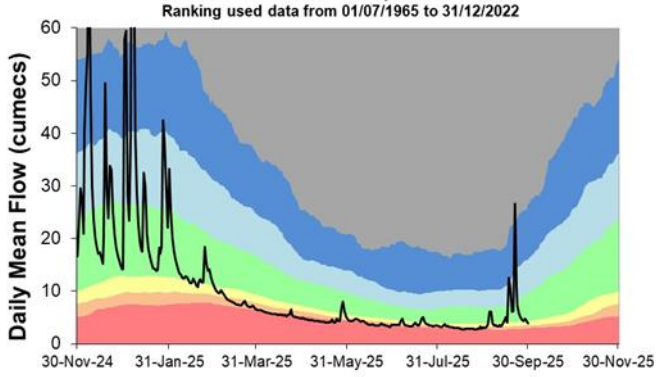
KEGWORTH, River Soar
Ranking used data from 01/12/1978 to 31/12/2022



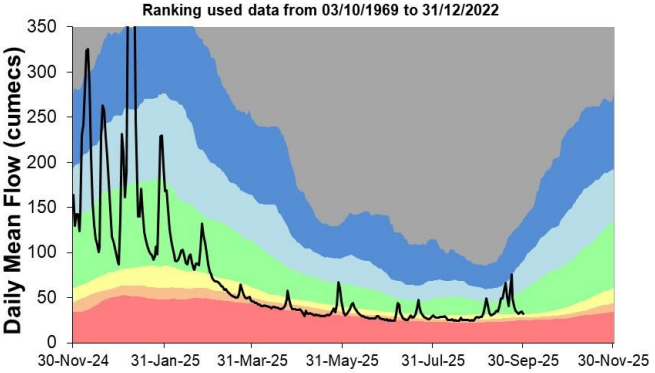
LLANYBLODWEL, Afon Tanat
Ranking used data from 01/06/1973 to 31/12/2022



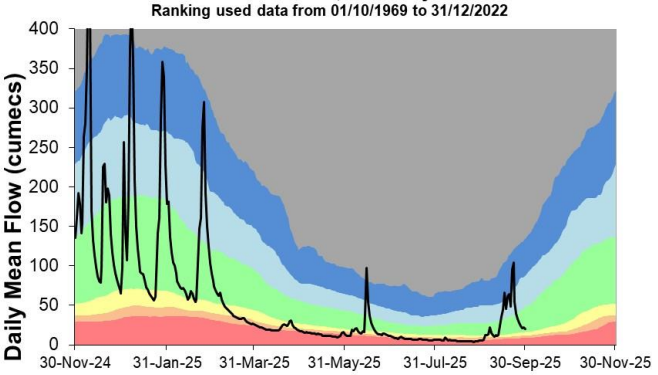
MARSTON ON DOVE, River Dove
Ranking used data from 01/07/1965 to 31/12/2022

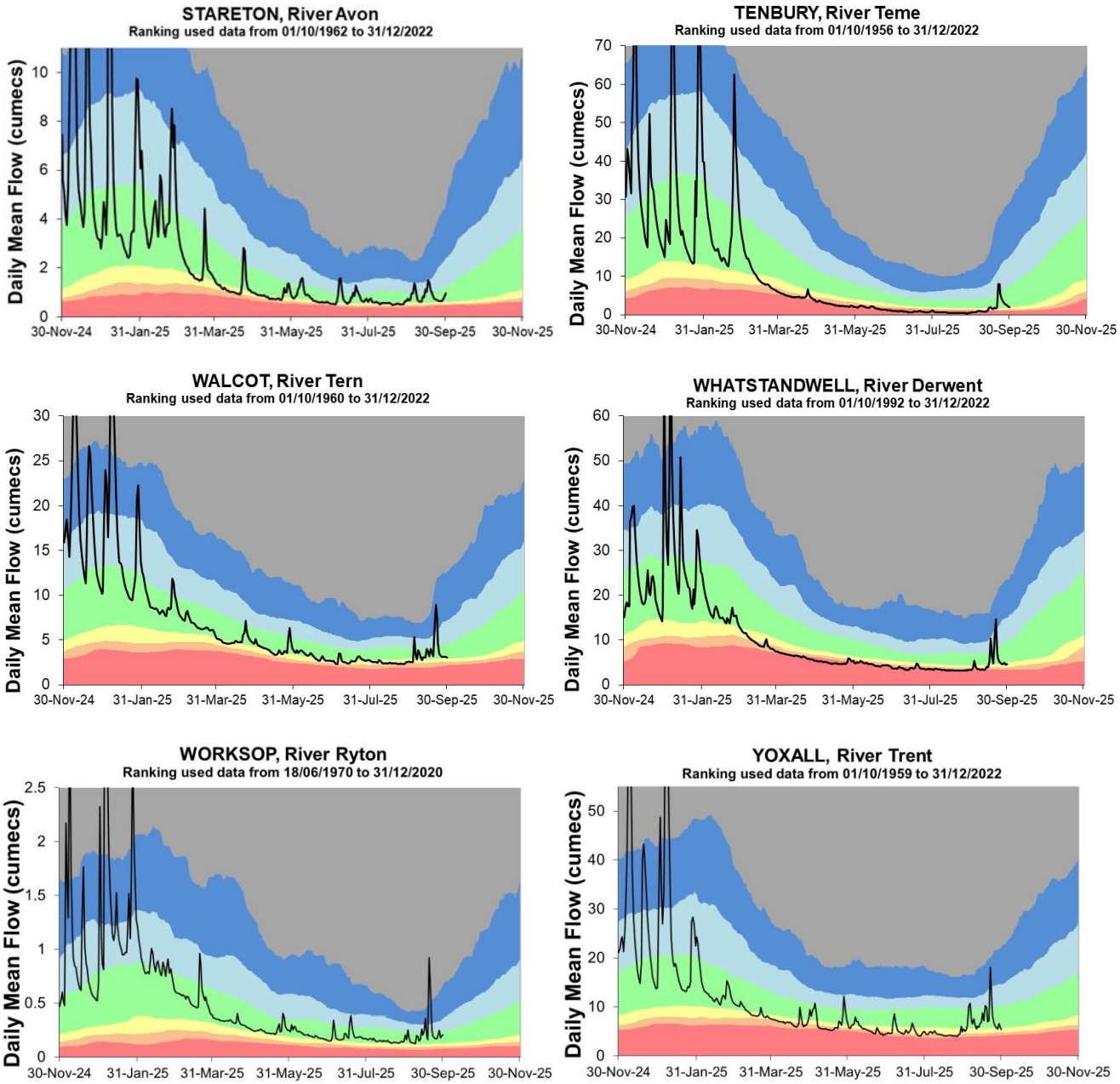


NORTH MUSKHAM, River Trent
Ranking used data from 03/10/1969 to 31/12/2022



REDBROOK, River Wye
Ranking used data from 01/10/1969 to 31/12/2022



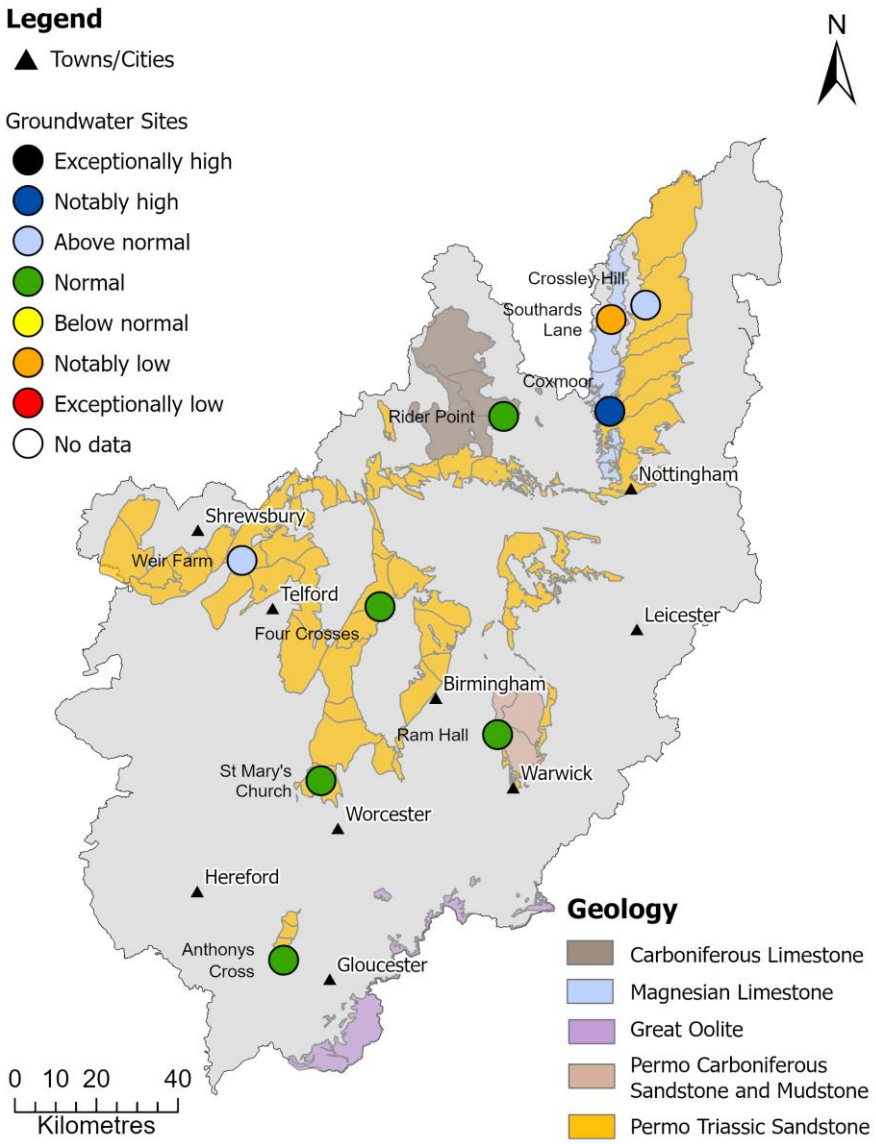


(Source: Environment Agency, 2025)

5 Groundwater levels

5.1 Groundwater levels map

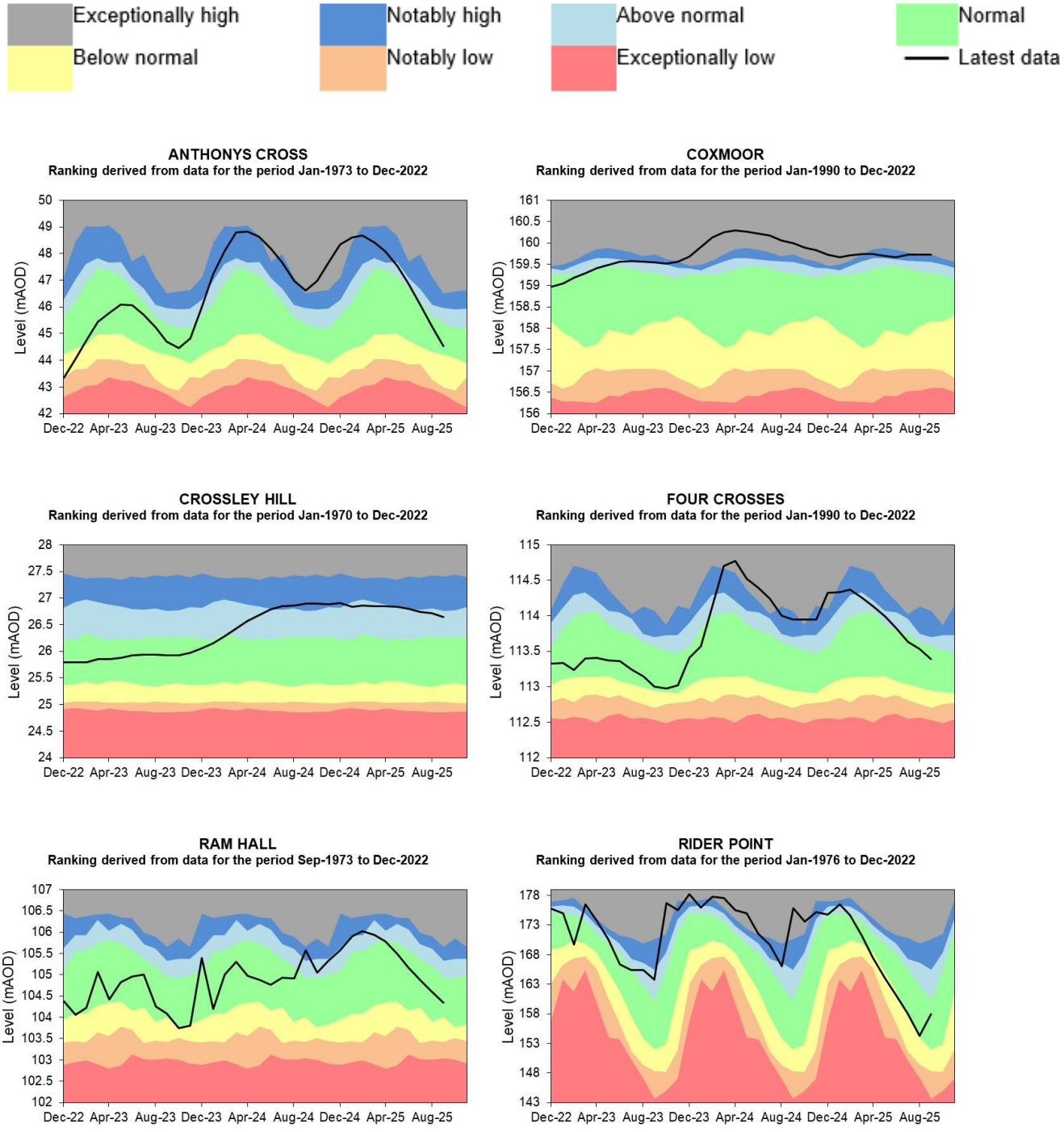
Figure 5.1: Groundwater levels for indicator sites at the end of September 2025, classed relative to an analysis of respective historic September levels. Table available in the appendices with detailed information, including aquifer type.

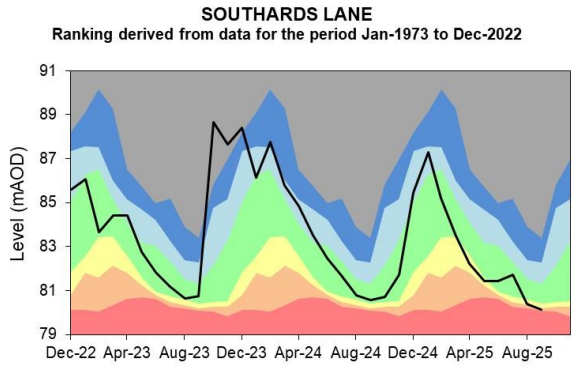


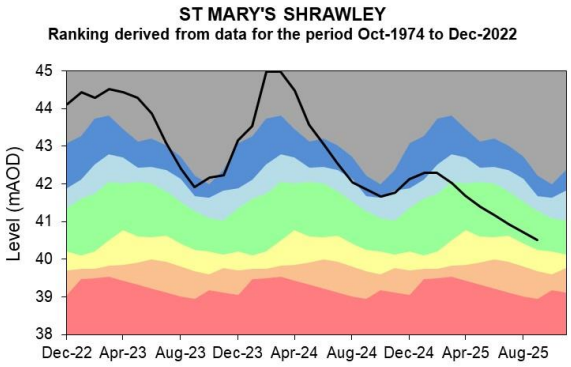
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2025.

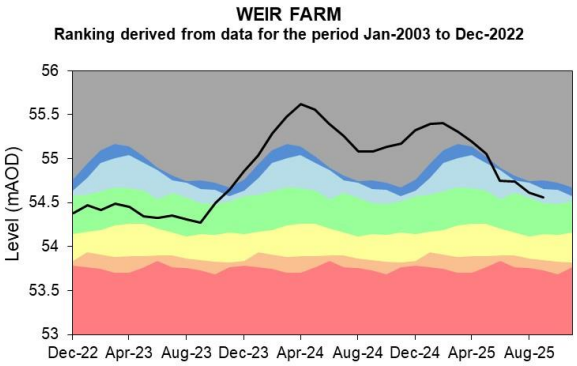
5.2 Groundwater level charts

Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 34 months compared to an analysis of historic end of month levels.





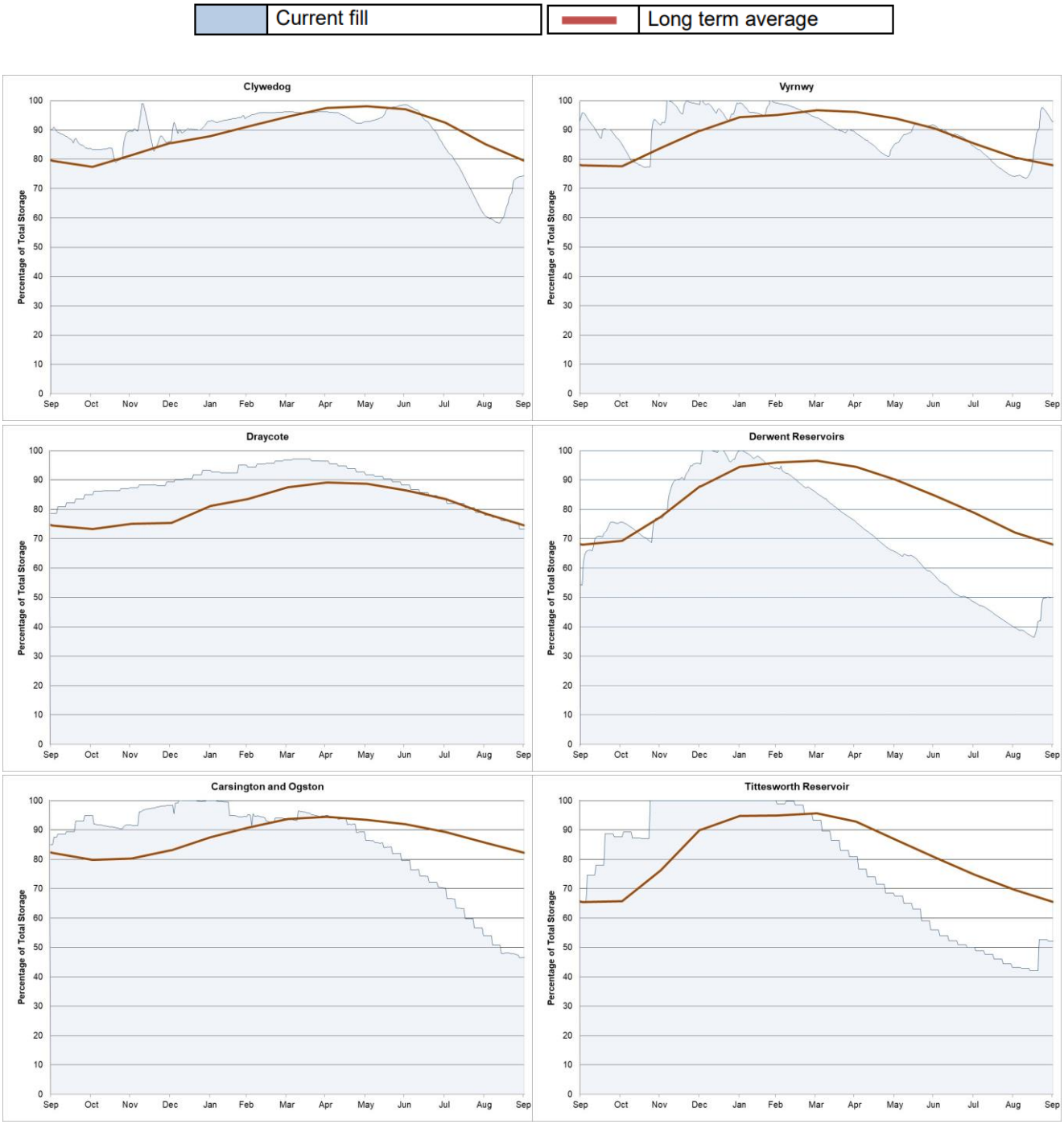


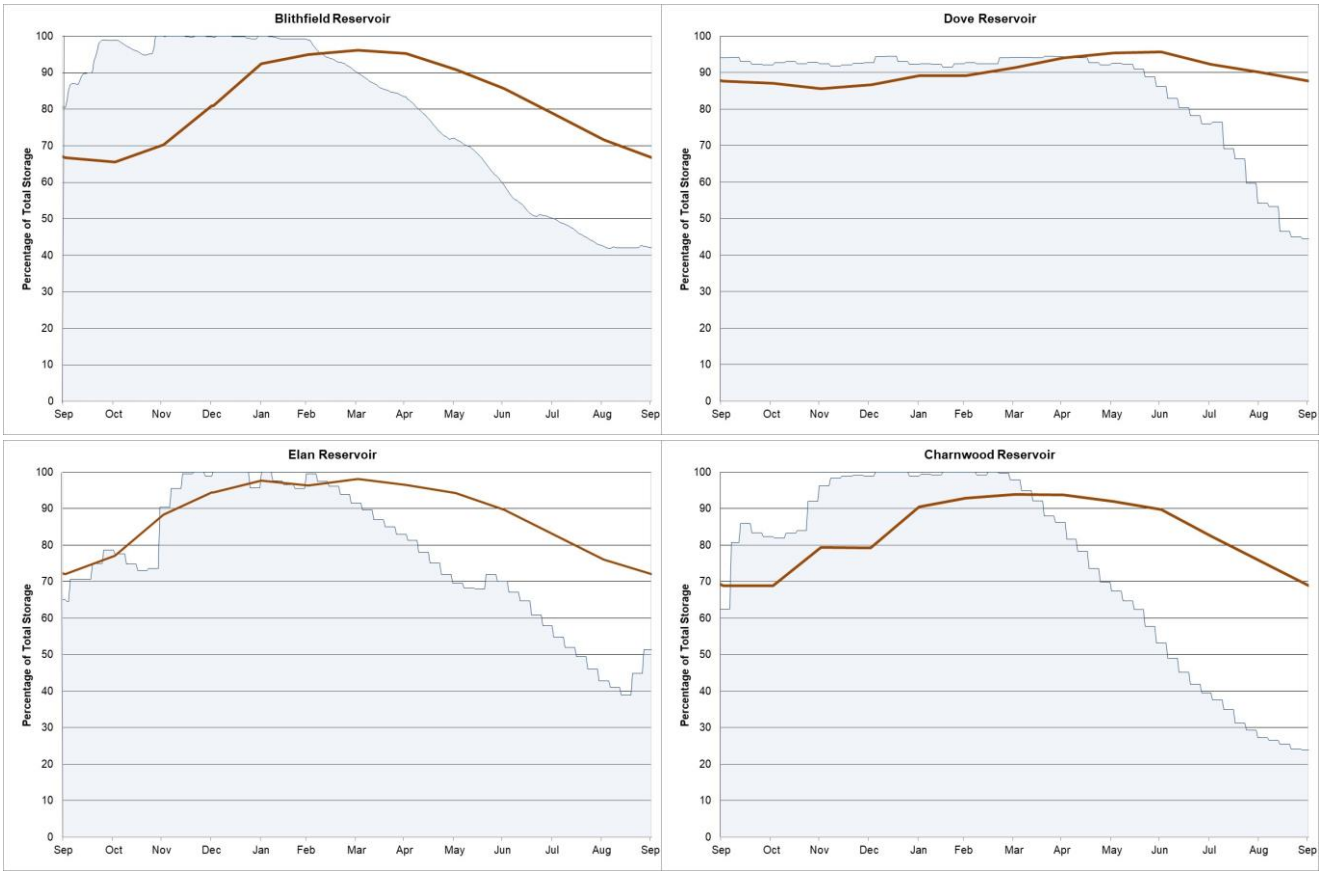


(Source: Environment Agency, 2025).

6 Reservoir stocks

Figure 6.1: End of month regional reservoir stocks compared to long term average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length. Please see Section 7.4 for a map detailing the locality of the Midlands reservoirs reported on.





(Source: water companies).

7 Glossary

7.1 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}).

Effective rainfall

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

Field capacity

Soil at field capacity is holding all of the water which it can hold against gravity.

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 1991 to 2020. 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 by 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 (for example, 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).

7.2 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

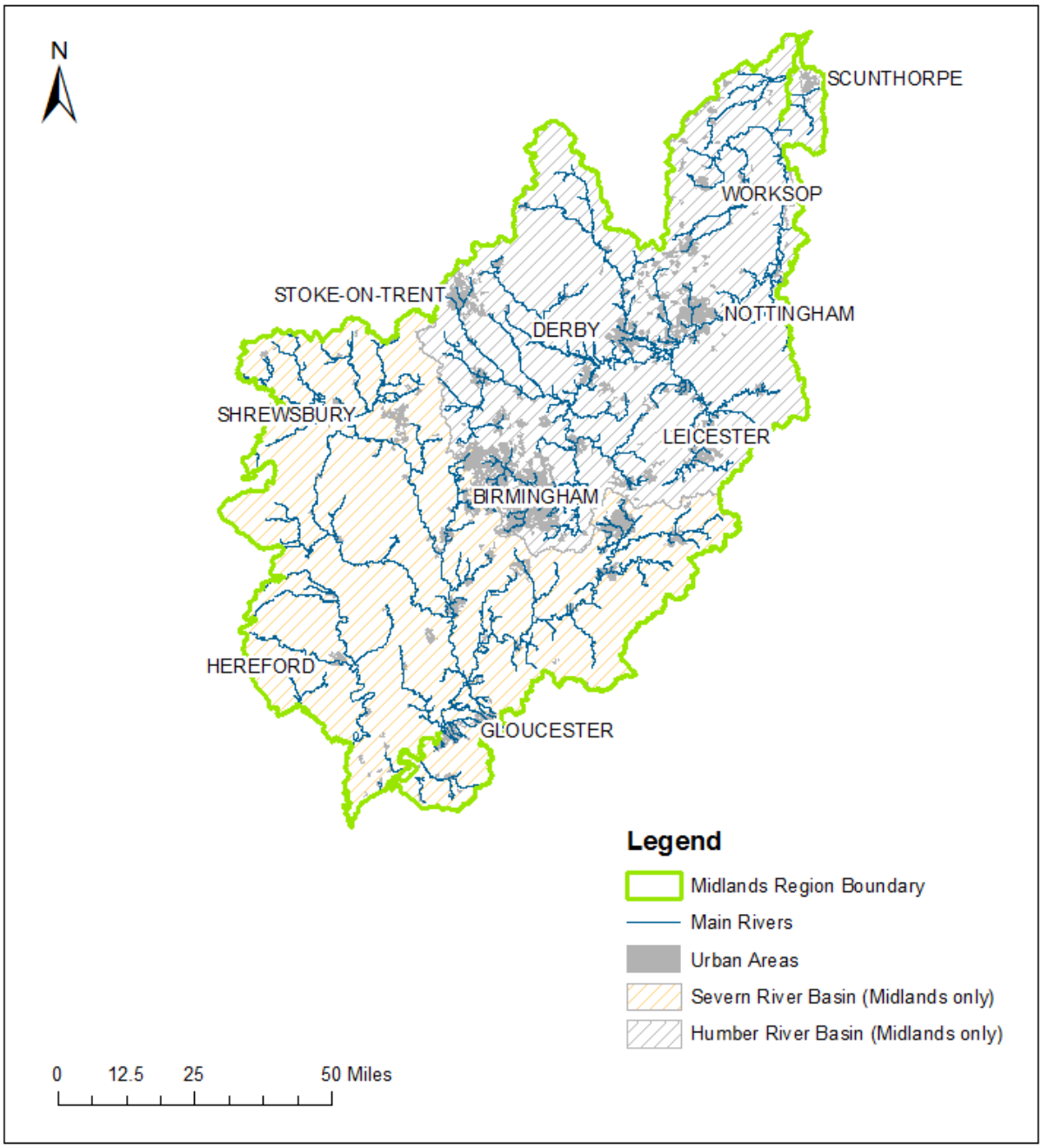
Value likely to fall within this band 8% of the time.

Exceptionally low

Value likely to fall within this band 5% of the time.

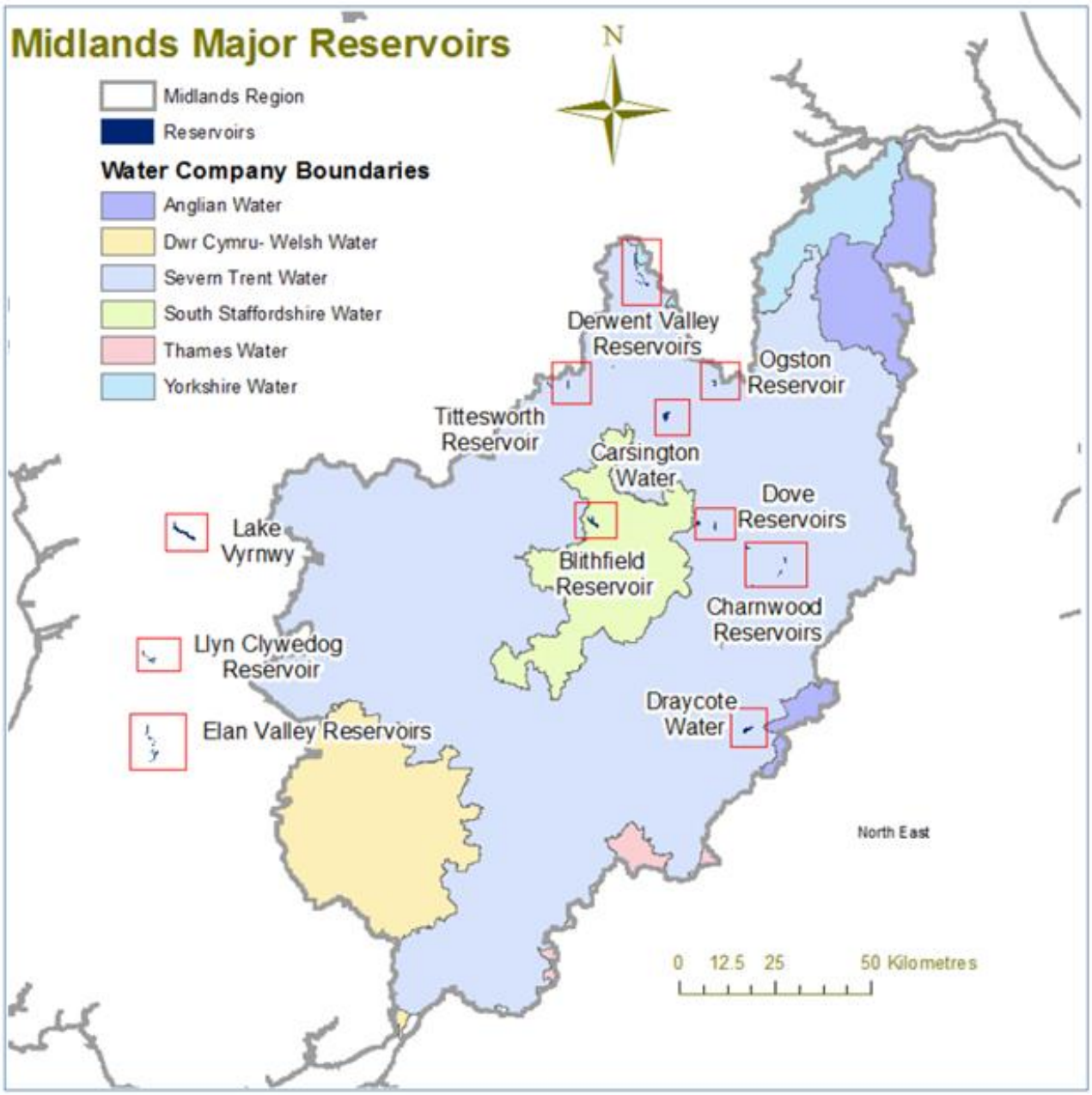
7.3 Midlands regional coverage

Figure 7.1: The Midlands regional boundary and the hydrological boundaries of the River Severn and River Trent.



7.4 Midlands major reservoirs

Figure 7.2: Location of major reservoirs in the Midlands.



8 Appendices

8.1 Water abstraction licence restrictions table

Area	Rivers and stations restricted
East Midlands	River Derwent at Derby St Mary's Rothley Brook at Rothley River Erewash at Sandiacre River Poulter at Cuckney
West Midlands	River Arrow at Broom River Avon at Evesham Badsey Brook at Offenham Bow Brook at Besford Bridge River Dene at Wellesbourne River Isbourne at Hinton on the Green Piddle Brook at Wyre Piddle River Stour at Wimpstone Glynch Brook at Bromsberrow River Leadon at Wedderburn Bridge River Meese at Tibberton River Perry at Yeaton River Roden at Rodington River Strine at Crudgington River Tern at Ternhill on Tern

Area	Rivers and stations restricted
	River Tern at Walcot
	River Sow at Great Bridgford
	River Trent at Yoxall
	River Trent at Darlaston
	River Blythe at Whitacre
	River Cole at Coleshill (Bacons End)
	River Trent at Drakelow
	River Teme at Knightsford Bridge
	River Teme at Tenbury
	River Tanat at Llanyblodwel
	Borle Brook at Dowles Brook at Oak Cottage
	Dick Brook at Dowles Brook at Oak Cottage
	Mor Brook at Dowles Brook at Oak Cottage
	River Salwarpe at Harford Hill
	River Stour at Puxton
	River Wye at Belmont
	River Frome at Bishops Frome
	River Lugg at Byton
	River Lugg at Lugwardine
	River Garren at Marstow Mill
	River Wye at Redbrook
	River Arrow at Titley Mill

Area	Rivers and stations restricted
	River Lugg at Butts Bridge River Frome at Yarkhill

8.2 Rainfall table

Hydrological area	Sep 2025 rainfall % of long term average 1991 to 2020	Sep 2025 band	Jul 2025 to September cumulative band	Apr 2025 to September cumulative band	Oct 2024 to September cumulative band
Avon To Evesham	103	Normal	Below normal	Exceptionally low	Notably low
Derwent (Midlands)	176	Notably High	Normal	Below normal	Below normal
Dove	172	Notably High	Normal	Below normal	Below normal
Lower Severn Estuary	136	Above Normal	Below normal	Exceptionally low	Below normal
Lower Trent	151	Above Normal	Normal	Notably low	Notably low
Lower Wye	146	Above Normal	Below normal	Exceptionally low	Below normal
Mid Severn	174	Notably High	Below normal	Notably low	Below normal

Hydrological area	Sep 2025 rainfall % of long term average 1991 to 2020	Sep 2025 band	Jul 2025 to September cumulative band	Apr 2025 to September cumulative band	Oct 2024 to September cumulative band
Shropshire Plains	183	Notably High	Normal	Below normal	Below normal
Soar	115	Normal	Below normal	Exceptionally low	Notably low
Tame	114	Normal	Below normal	Exceptionally low	Notably low
Upper Trent	156	Above Normal	Normal	Below normal	Below normal
Welsh Mountains	198	Notably High	Normal	Normal	Below normal

8.3 River flows table

Site name	River	Catchment	Sep 2025 band	Aug 2025 band
Auckley	Torne	Torne	Normal	Exceptionally low
Bewdley	Severn	Severn Lower Mid	Above normal	Exceptionally low
Butts Bridge	Lugg	Lugg	Below normal	Exceptionally low
Clifton Hall	River Mease	Mease	Normal	Notably low
Deerhurst	Severn	Severn Lower	Above normal	Exceptionally low
Derby St. Marys	Derwent	Derwent Der to Markeaton confl.	Below normal	Below normal
Ebley Mill	Frome (Gloucs.)	Frome Gloucs.	Notably low	Exceptionally low
Evesham	Avon (Midlands)	Avon Warwks. Lower	Normal	Below normal
Great Bridgford	Sow	Sow Upper	Normal	Notably low
Kegworth	Soar	Soar to Kingston Brook confl.	Normal	Notably low
Llanyblodwel	Tanat	Severn Upper River Tanat	Above normal	Notably low

Site name	River	Catchment	Sep 2025 band	Aug 2025 band
Marston On Dove	Dove (Midlands)	Dove Derb to Hilton Br confl.	Normal	Exceptionally low
North Muskham	Trent	Trent to Cromwell	Normal	Notably low
Redbrook	Wye (Herefordshire)	Wye H and W d s Lugg	Normal	Exceptionally low
Stareton	Avon (Midlands)	Avon Warwks. Upper	Normal	Below normal
Tenbury	Teme	Teme	Normal	Exceptionally low
Walcot	Tern	Tern	Normal	Notably low
Wedderburn Bridge	Leadon	Leadon	No Data	No Data
Whatstandwell	Derwent	Derwent Derb to Amber confl.	Normal	Exceptionally low
Worksop	Ryton	Ryton Upper to Oldcoates Dyke	Normal	Below normal
Yoxall	Trent	Trent to Tame Mease confl.	Normal	Notably low

8.4 Groundwater table

Site name	Aquifer	End of Sep 2025 band	End of Aug 2025 band
Anthony's Cross	Severn Vale Permo Triassic Sandstone	Normal	Normal
Coxmoor	Permo Triassic Sandstone	Notably high	Exceptionally high
Crossley Hill	Permo Triassic Sandstone	Above normal	Above normal
Four Crosses	Grimsby Ancholme Louth Limestone	Normal	Normal
Ram Hall, Meriden	Grimsby Ancholme Louth Limestone	Normal	Normal
Rider Point Via Gellia	Carboniferous Limestone	Normal	Normal
Southards Lane, Bolsover	Magnesian Limestone	Notably low	Below normal
St Mary's Church, Shrawley	East Shropshire Permo-triassic Sandstone	Normal	Normal
Weir Farm	Bridgnorth Sandstone Formation	Above normal	Above normal