Monthly water situation report: Midlands

1 Summary - July 2025

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

Rainfall - In July, all Midlands hydrological catchments received less than 100% of their long term average (LTA) rainfall. The amount of rainfall received varied across the region, ranging between normal and below normal rainfall amounts relative to the LTA. The driest areas were in the west and the wettest in the east.

Soil moisture deficit - Soil moisture deficit (SMD) across the Midlands has increased in July from the previous month, meaning soils have become drier. By the end of the month, soils remained drier than expected for the time of year.

River flows - In July, 5 sites recorded exceptional low, 5 sites recorded notably low, 5 sites recorded below normal and 4 sites recorded normal monthly mean flows relative to the LTA. No data is available for Deerhurst and Wedderburn Bridge.

Groundwater levels - As of the end of July, all of the Midlands groundwater sites recorded normal or higher groundwater levels compared to the LTA. The majority of sites had a decrease in groundwater levels since June.

Reservoir stocks - By the end of July, most Midlands reservoirs had below average storage compared to the LTA, with Charnwood and Derwent reservoirs below 50% storage.

1.1 Rainfall

In July, all Midlands hydrological catchments received less than 100% of their LTA rainfall. Seven hydrological catchments located largely in the eastern half of the Midlands received normal rainfall totals ranging from 80% to 97% of the LTA. These were the Upper Trent, Dove, Derwent, Lower Trent, Tame, Soar and Avon catchments. Five hydrological catchments in the western half of the Midlands received below normal rainfall totals ranging from 48% to 65% of the LTA. These were the Welsh Mountains, Shropshire Plains, Mid Severn, Lower Wye and Lower Severn.

Over the last 3 months, only the Welsh Mountains received normal rainfall totals relative to the 3 month LTA. Four north-eastern hydrological catchments received below normal rainfall totals relative to the 3 month LTA. Four more received notably low totals relative to the 3 month LTA. Three catchments recorded exceptionally low rainfall totals, these were the Mid Severn, Lower Wye and Lower Severn, ranging from 49% to 55% of their 3 month LTA.

Over the last 6 months, every single hydrological catchment in the Midlands received exceptionally low cumulative rainfall totals, ranging from 52% to 60% of their 6 month LTA. The 6 month cumulative rainfall totals for the Midlands region as a whole were ranked as the second driest since 1871.

Looking at the last 12 months' rainfall total combined, rainfall has been normal for the majority of the catchments in the Midlands. Three hydrological catchments recorded below normal cumulative rainfall totals, being the Welsh Mountains, Dove and Derwent, at between 83% and 87% of the 12 month LTA.

1.2 Soil moisture deficit and recharge

SMD across the Midlands in July has slightly increased since last month, meaning that soils have become drier. With the exception of the Welsh Mountains, Mid Severn and the Lower Wye, all hydrological catchments recorded a SMD between 101mm to 130mm. The Welsh Mountains recorded a SMD value between 71mm to 100mm meaning soils were slightly wetter than the other catchments in the Midlands. The Mid Severn and Lower Wye recorded a SMD value between 131mm and 160mm meaning soils were slightly drier than the other catchments in the Midlands.

By the end of July, SMD values were much larger than their respective LTA for the time of year, meaning soils are drier than expected for the time of year.

1.3 River flows

In July, 5 sites recorded exceptionally low monthly mean flows ranging from 16% to 50% of the LTA. These were Whatstandwell, Tenbury, Butts Bridge, Redbrook and Ebley Mill, with all but Whatstandwell being in the western half of the Midlands. Five sites recorded notably low monthly mean flows. These were Auckly, Derby St Marys, Marston On Dove, Great Bridgeford and Bewdley. Five more sites recorded below normal monthly mean flows. These were North Muskham, Kegworth, Yoxall, Clifton Hall and Walcot. The remaining 4 sites recorded normal monthly mean flows. These were Worksop, Llanyblodwel, Stareton and Evesham.

Wedderburn Bridge has been showing unreliable data from September 2024 onwards, therefore, data has been removed from this report. No data is available for Deerhurst due to current issues regarding recording at low flows.

1.4 Groundwater levels

At the end of July, all of the Midlands groundwater sites recorded normal or higher groundwater levels compared to the LTA. Southards Land, Rider Point, Four Crosses, Ram Hall, St Mary's Church and Anthonys Cross recorded normal groundwater levels relative to the LTA. A further 2 sites, Weir Farm and Crossley Hill, received above normal groundwater levels. Coxmoor in the north-east received notably high groundwater levels at the end of July relative to the LTA.

Out of all reported groundwater sites, the majority of sites had a decrease in groundwater levels since June. The only exception was Southards Lane which recorded an increase in groundwater levels.

1.5 Reservoir stocks

By the end of July, the majority of Midlands reservoirs had below average storage compared to the LTA. Charnwood and Derwent reservoirs had below 50% storage by the end of July, whereas Clywedog, Vrynwy and Draycote reservoirs were hovering around their LTAs, at 83.8%, 84.6% and 83.7% storage levels respectively.

All reservoirs in the Midlands experienced a reduction in storage since June.

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 to ensure the needs of water users and the environment are met.

A number of low flow alleviation schemes are also active across the area.

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. River Severn Regulation began on 9 May 2025 and as of the end of July, there have been 46 days of Severn Regulation so far.

Table 1.1: River Severn operational releases

Water supply (Ml/d)	Total releases	Normal releases	Regulation releases	Flood drawdown releases
Llyn Clywedog	350 Ml/d	18 Ml/d	332 Ml/d	0 Ml/d
Lake Vyrnwy	100 Ml/d	42 Ml/d	58 Ml/d	0 Ml/d
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 July.

For all of July, storage in the Ellan Valley reservoirs was below the release control line. For all of July, the flows at Rebdrook gauging station were below the regulation threshold.

1.9 Water abstraction restrictions

As of 31 July there were 110 water abstraction licence restrictions in place across the Midlands affecting 434 licences in total.

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

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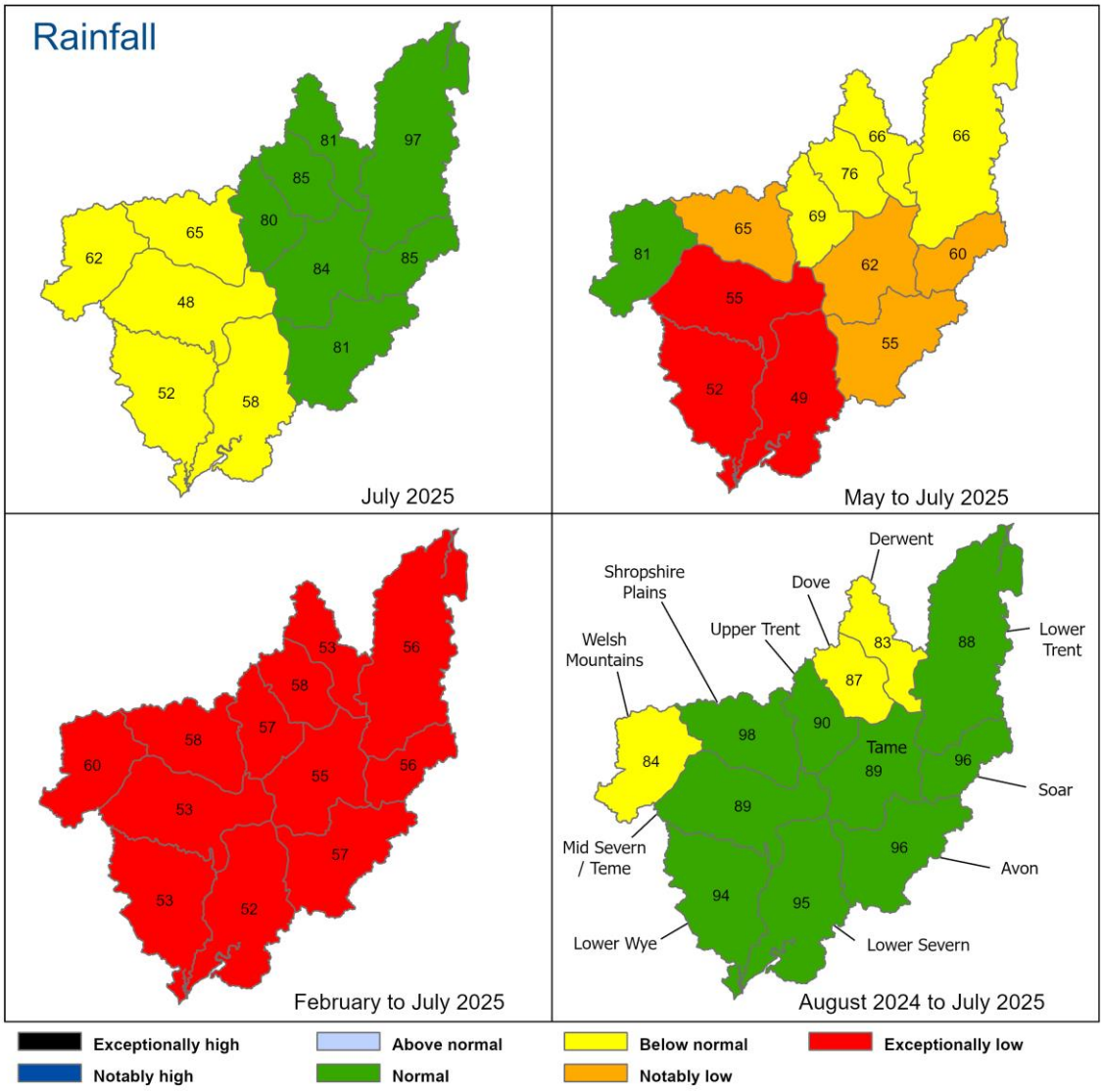
Contact Details: 03708 506 506

2 Rainfall

2.1 Rainfall map

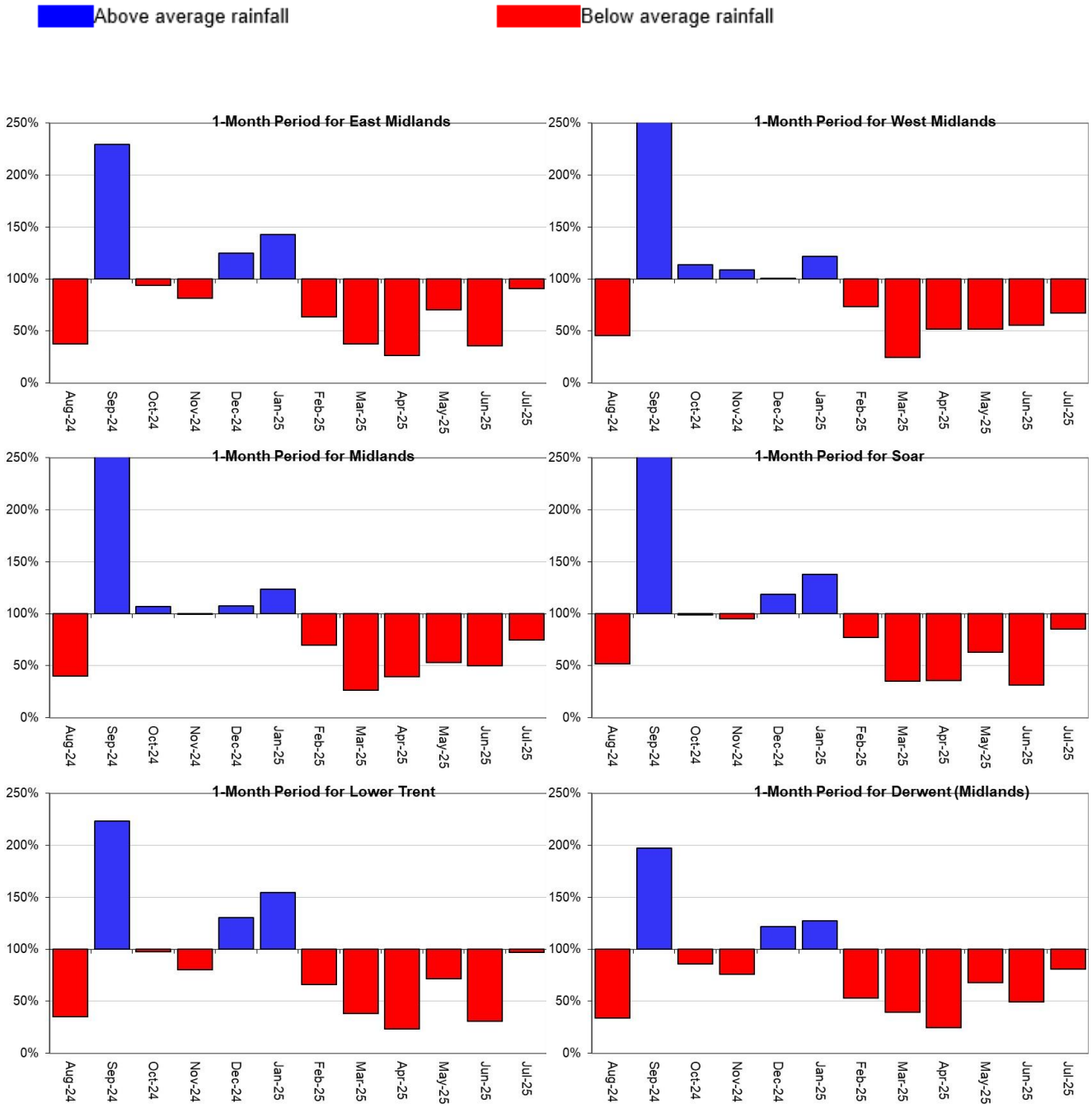
Figure 2.1: Rainfall as % LTA for hydrological areas for the current month (up to 31 July 2025), the last 3 months, the last 6 months, and the last 12 months, relative to an analysis of respective historic totals from 1991 to 2020. Table available in the appendices with detailed information.

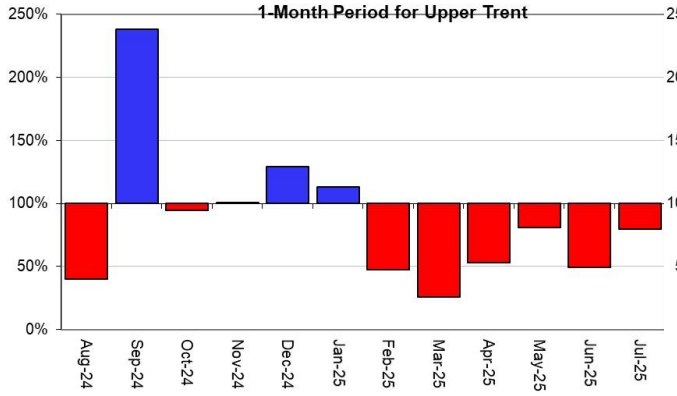


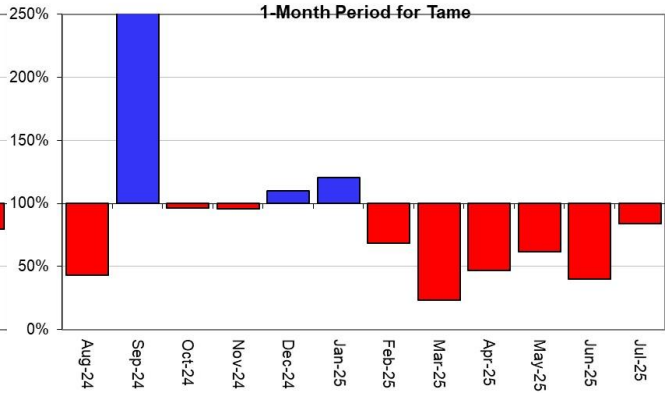
Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges (Source: Environment Agency. Crown Copyright, 100024198, 2025). HadUK data based on the Met Office 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

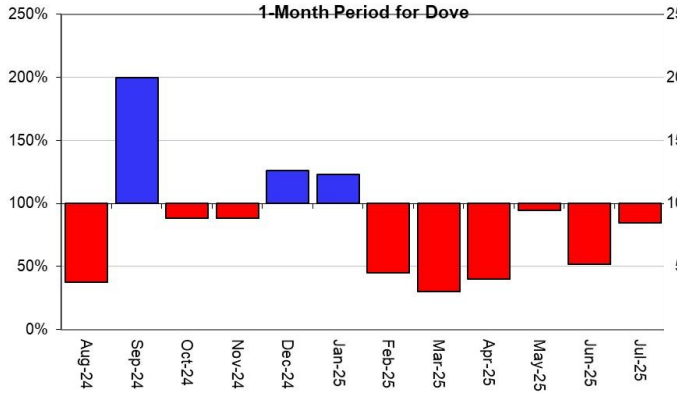
2.2 Rainfall charts

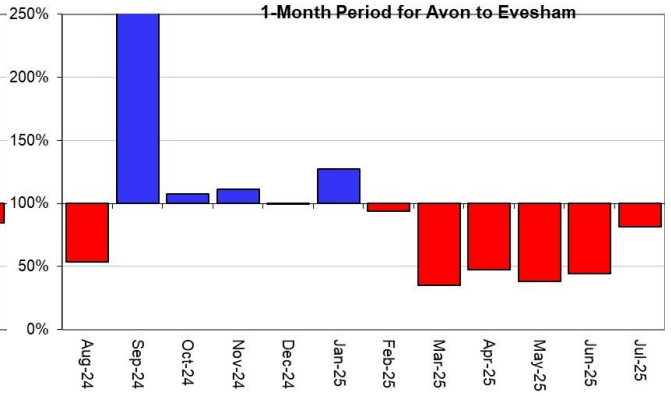
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for hydrological areas across the Midlands region.

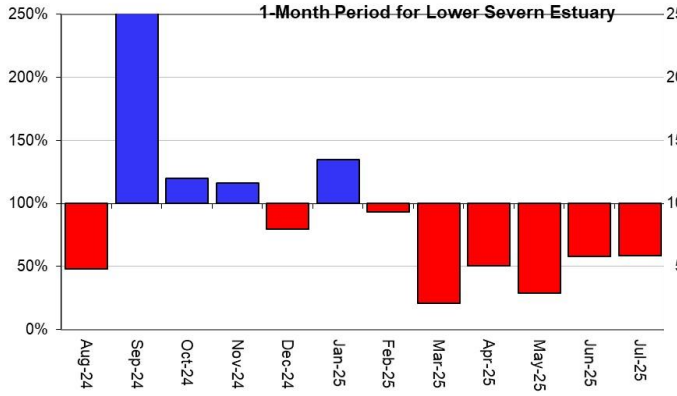


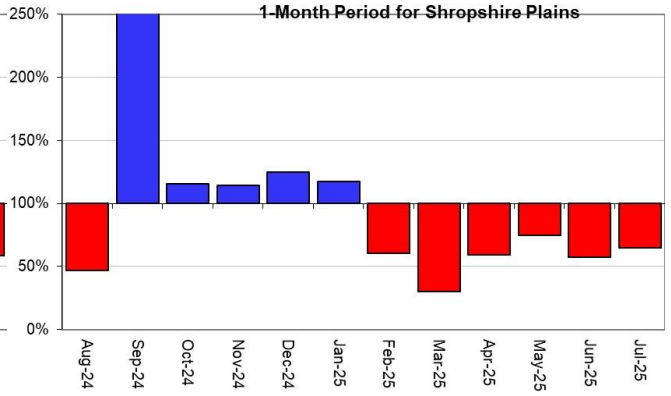

1-Month Period for Upper Trent
250%
200%
150%
100%
50%
0%
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25

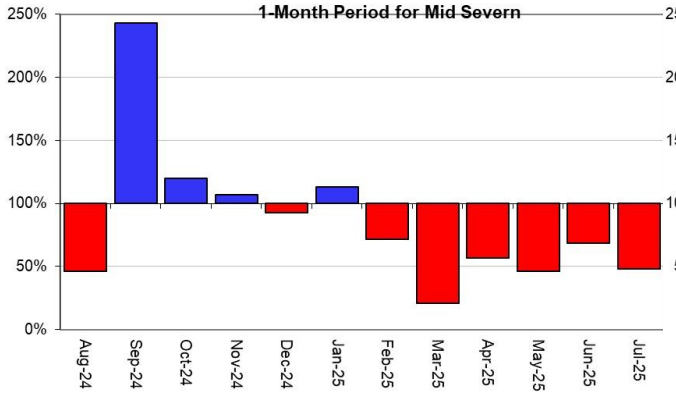

1-Month Period for Tame
250%
200%
150%
100%
50%
0%
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25

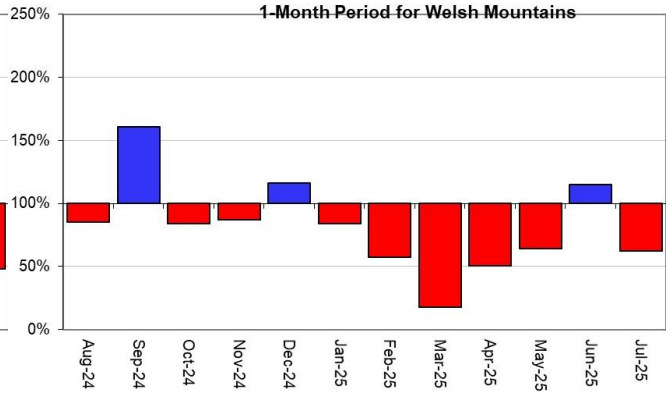

1-Month Period for Dove
250%
200%
150%
100%
50%
0%
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25

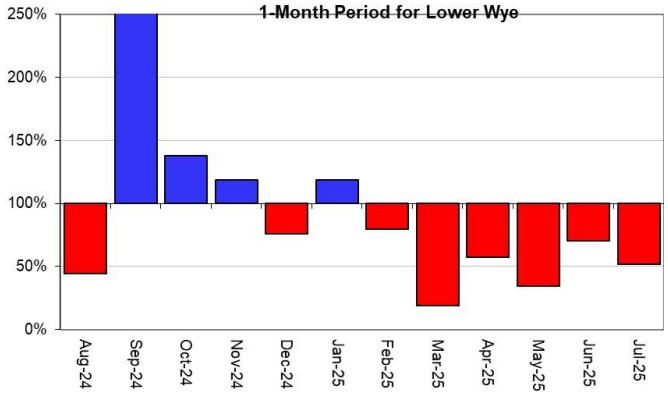

1-Month Period for Avon to Evesham
250%
200%
150%
100%
50%
0%
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25


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


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





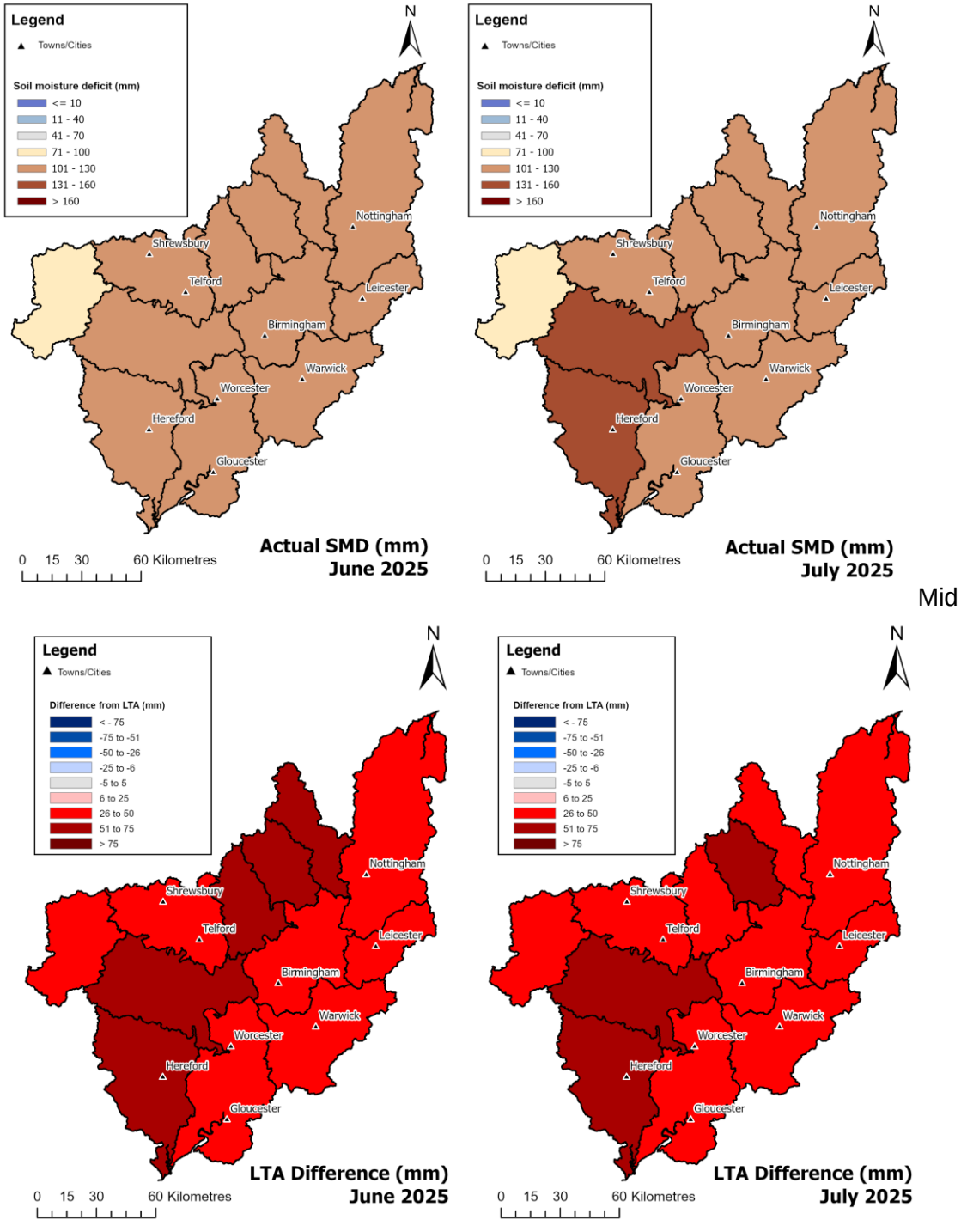


Provisional data based on Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges (Source: Environment Agency. Crown Copyright, 100024198, 2025). HadUK data based on the Met Office 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

3 Soil moisture deficit

3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending 31 July 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.

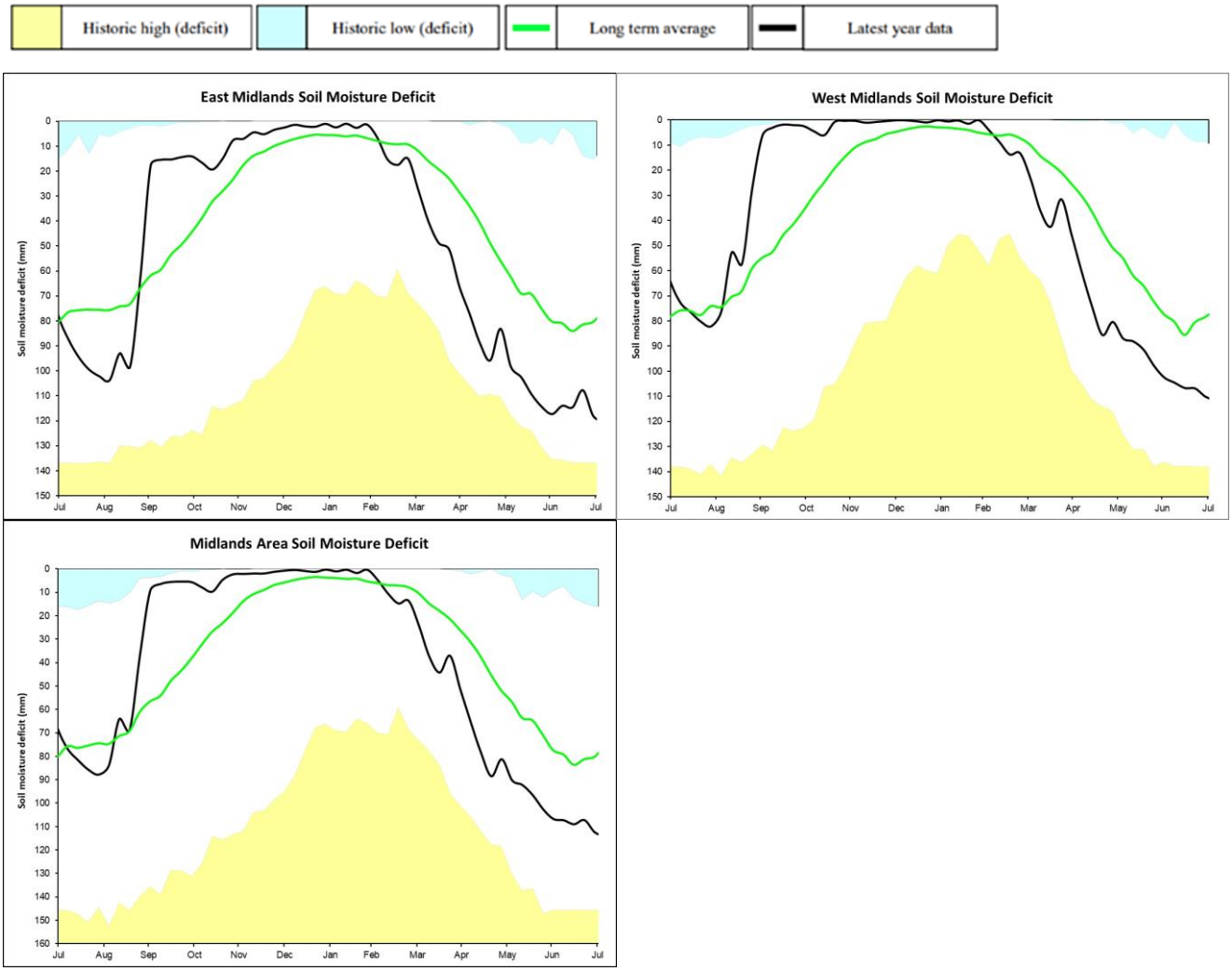


Mid

(Source: Met Office. Crown copyright, 2025). All rights reserved. Environment Agency, 100024198, 2025.

3.2 Soil moisture deficit charts

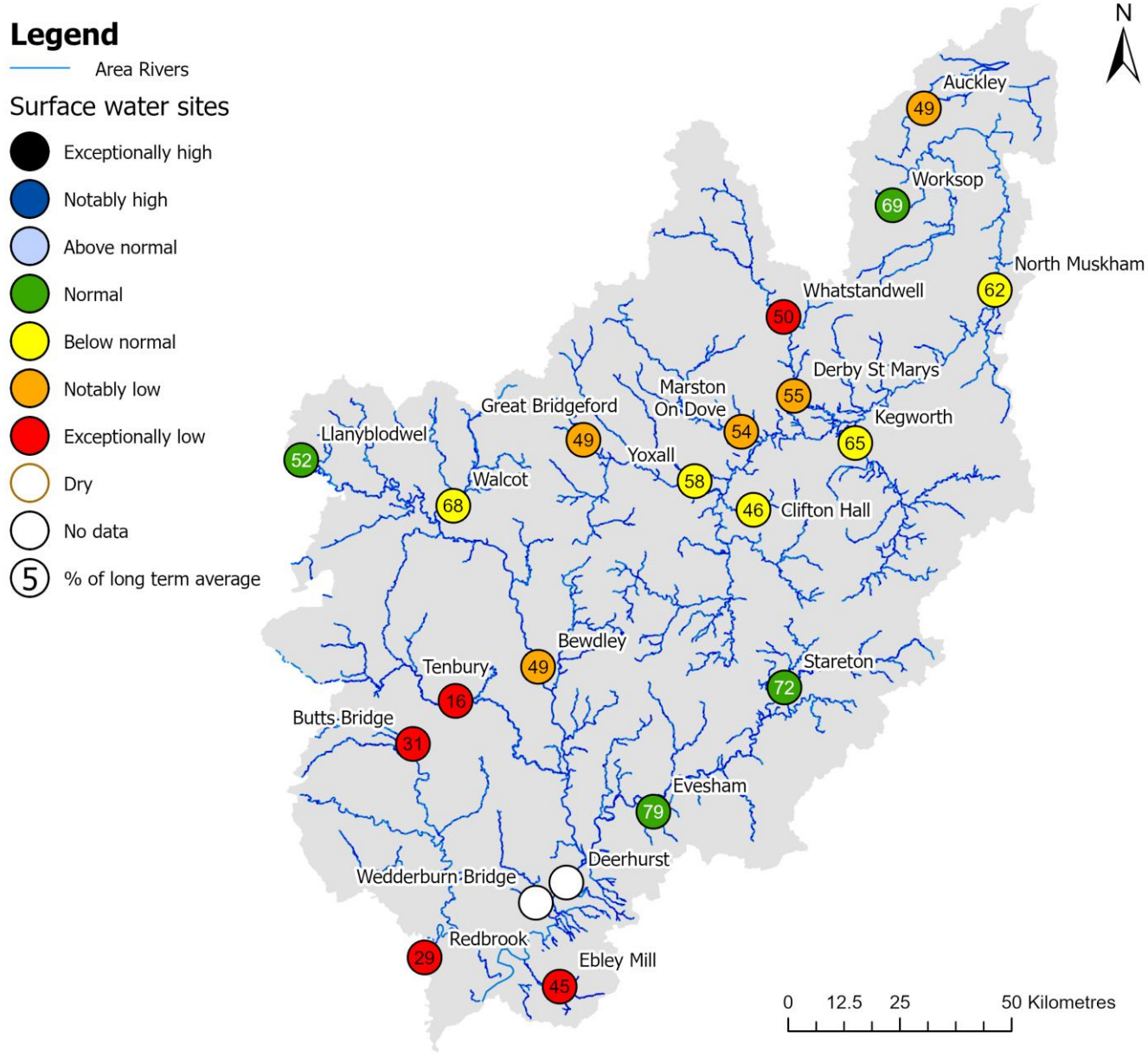
Figure 3.2: Latest soil moisture deficit charts for selected areas across the Midlands.



4 River flows

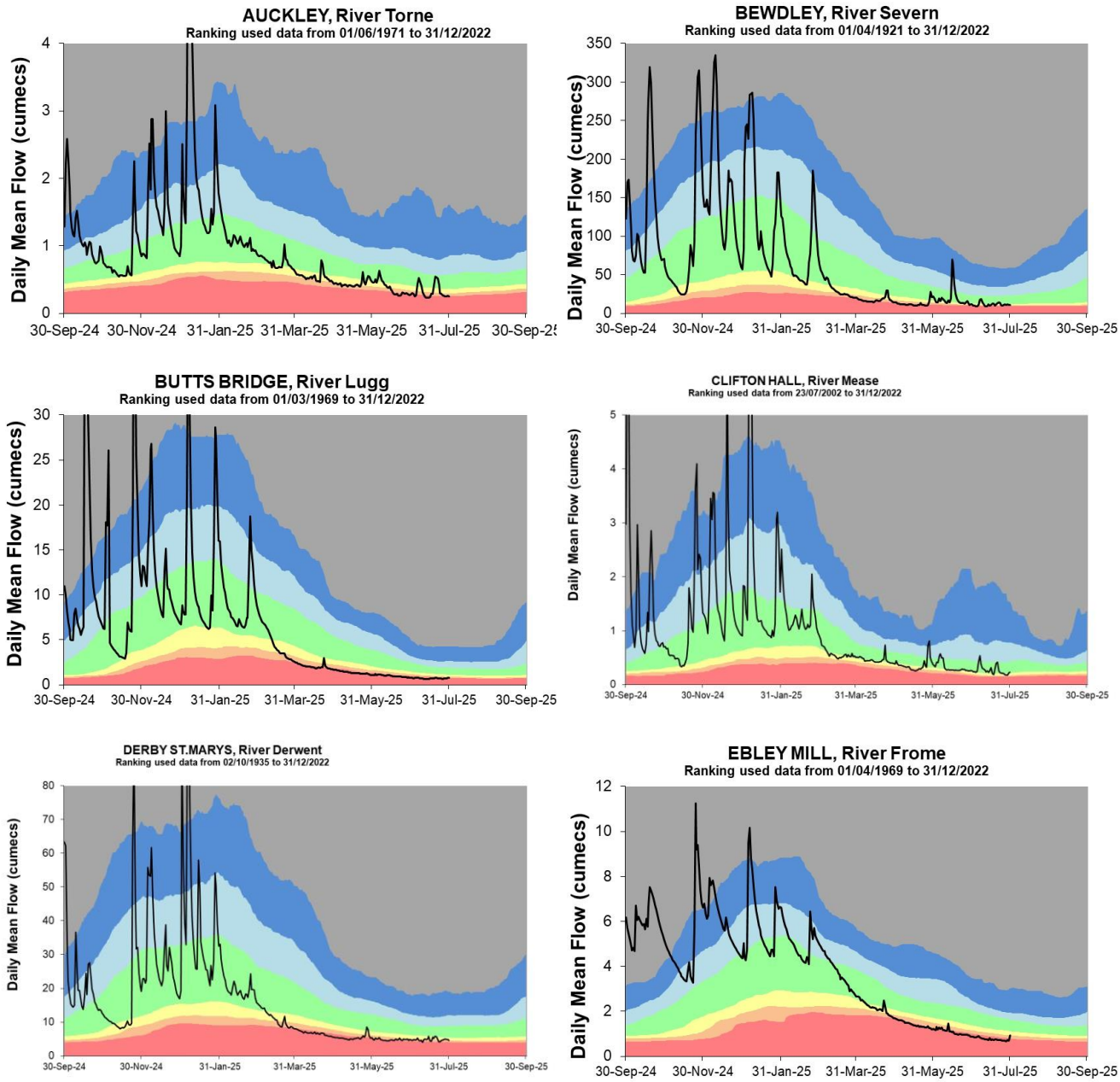
4.1 River flows map

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



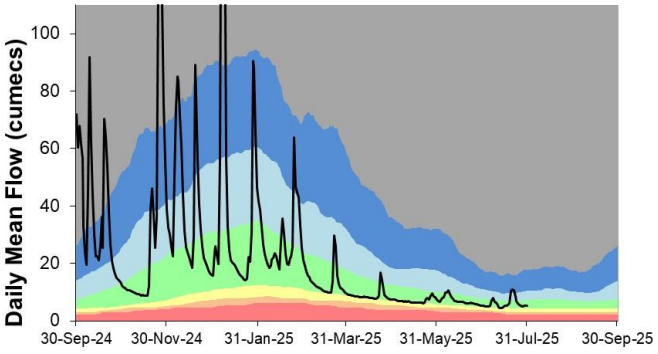
4.2 River flow charts

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.



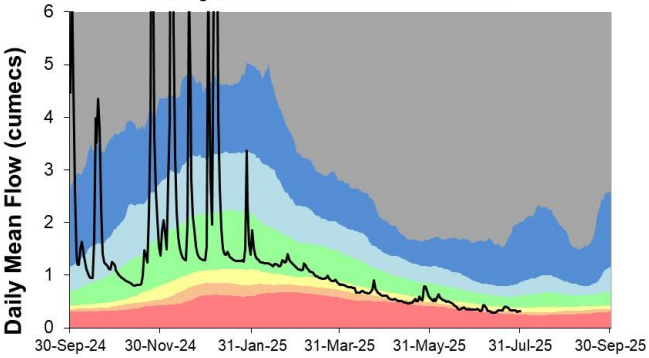
EVESHAM, River Avon

Ranking used data from 01/12/1936 to 31/12/2022



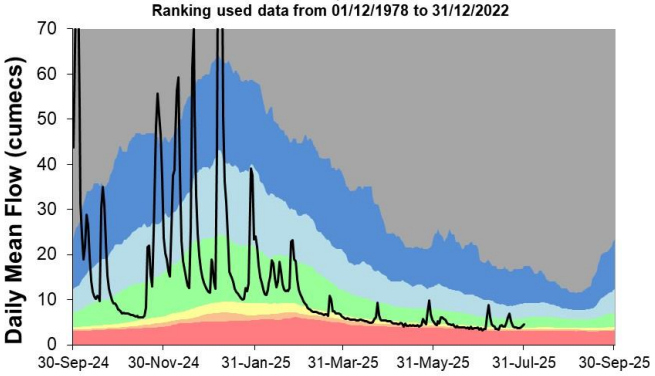
GREAT BRIDGFORD, River Sow

Ranking used data from 18/01/1971 to 31/12/2022



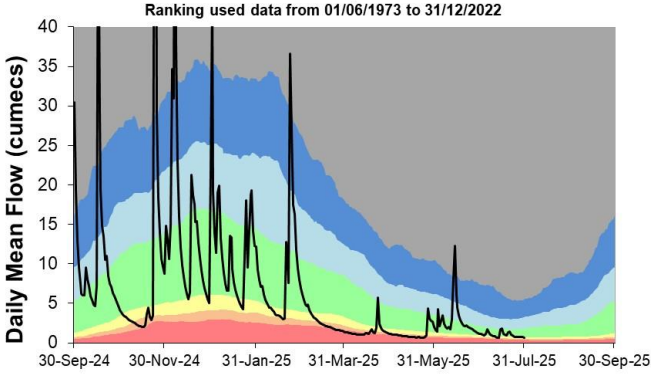
KEGWORTH, River Soar

Ranking used data from 01/12/1978 to 31/12/2022



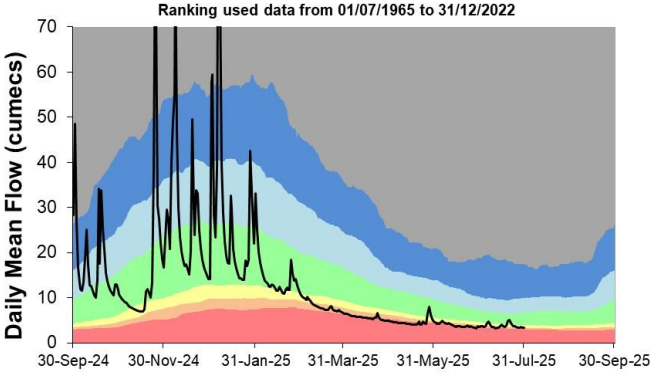
LLANYBLODWEL, Afon Tanat

Ranking used data from 01/06/1973 to 31/12/2022



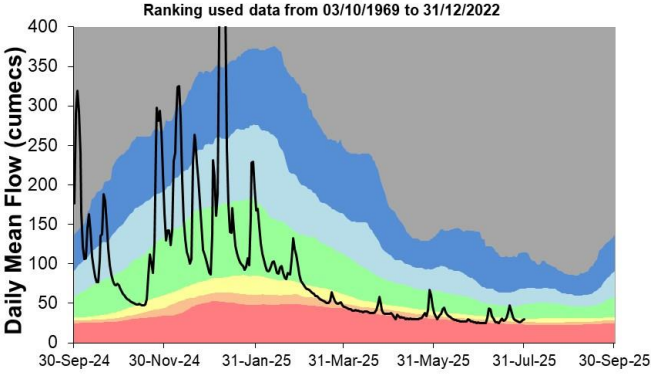
MARSTON ON DOVE, River Dove

Ranking used data from 01/07/1965 to 31/12/2022



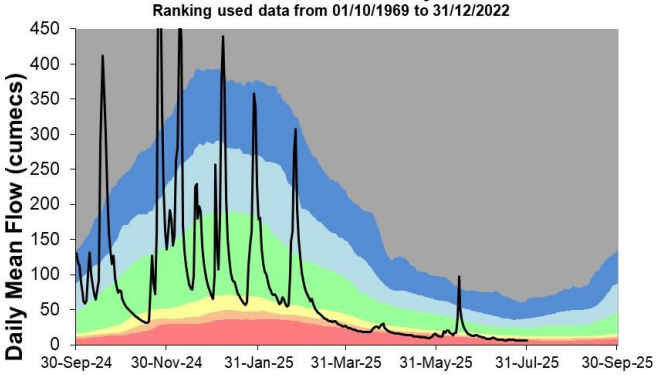
NORTH MUSKHAM, River Trent

Ranking used data from 03/10/1969 to 31/12/2022



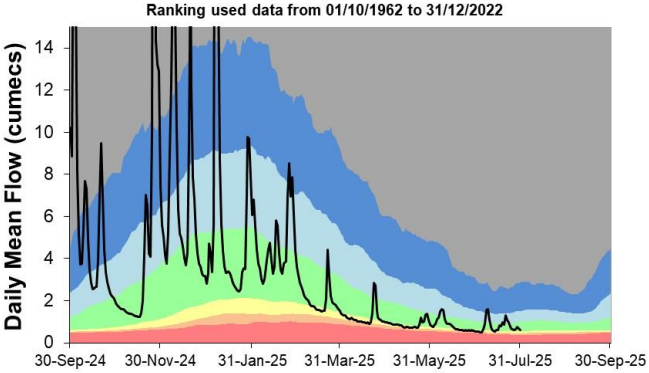
REDBROOK, River Wye

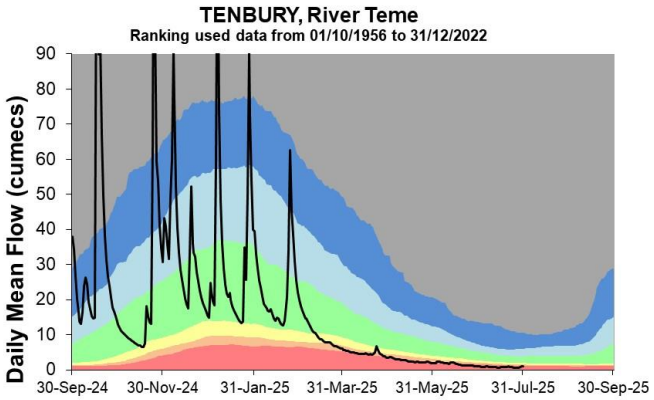
Ranking used data from 01/10/1969 to 31/12/2022

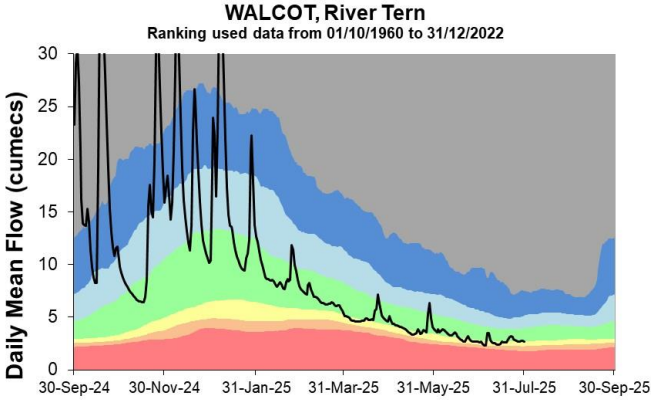


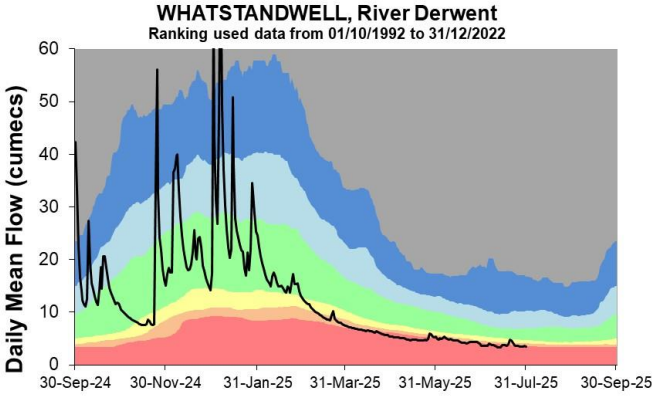
STARETON, River Avon

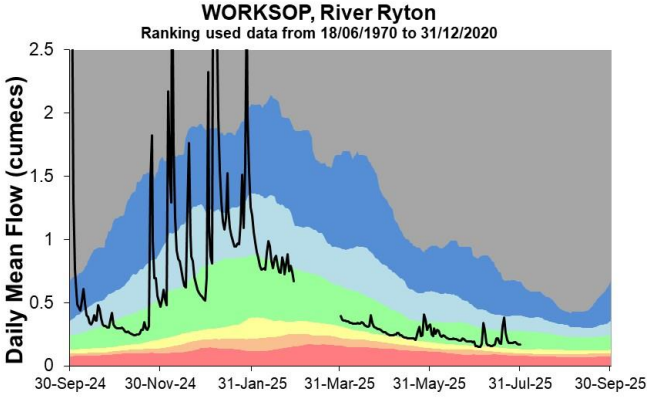
Ranking used data from 01/10/1962 to 31/12/2022

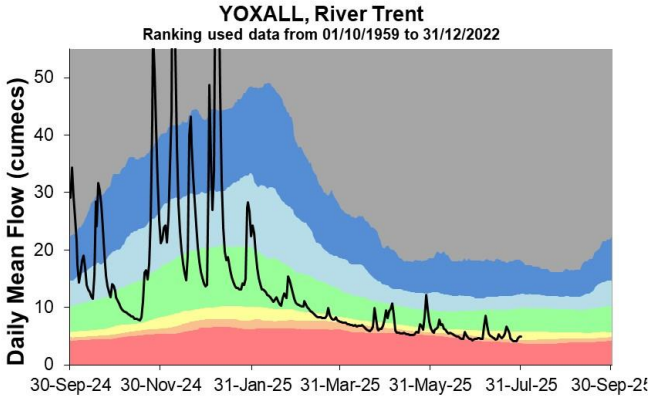



TENBURY, River Teme
Ranking used data from 01/10/1956 to 31/12/2022
Daily Mean Flow (cumecs)
0
10
20
30
40
50
60
70
80
90
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25


WALCOT, River Tern
Ranking used data from 01/10/1960 to 31/12/2022
Daily Mean Flow (cumecs)
0
5
10
15
20
25
30
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25


WHATSTANDWELL, River Derwent
Ranking used data from 01/10/1992 to 31/12/2022
Daily Mean Flow (cumecs)
0
10
20
30
40
50
60
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25

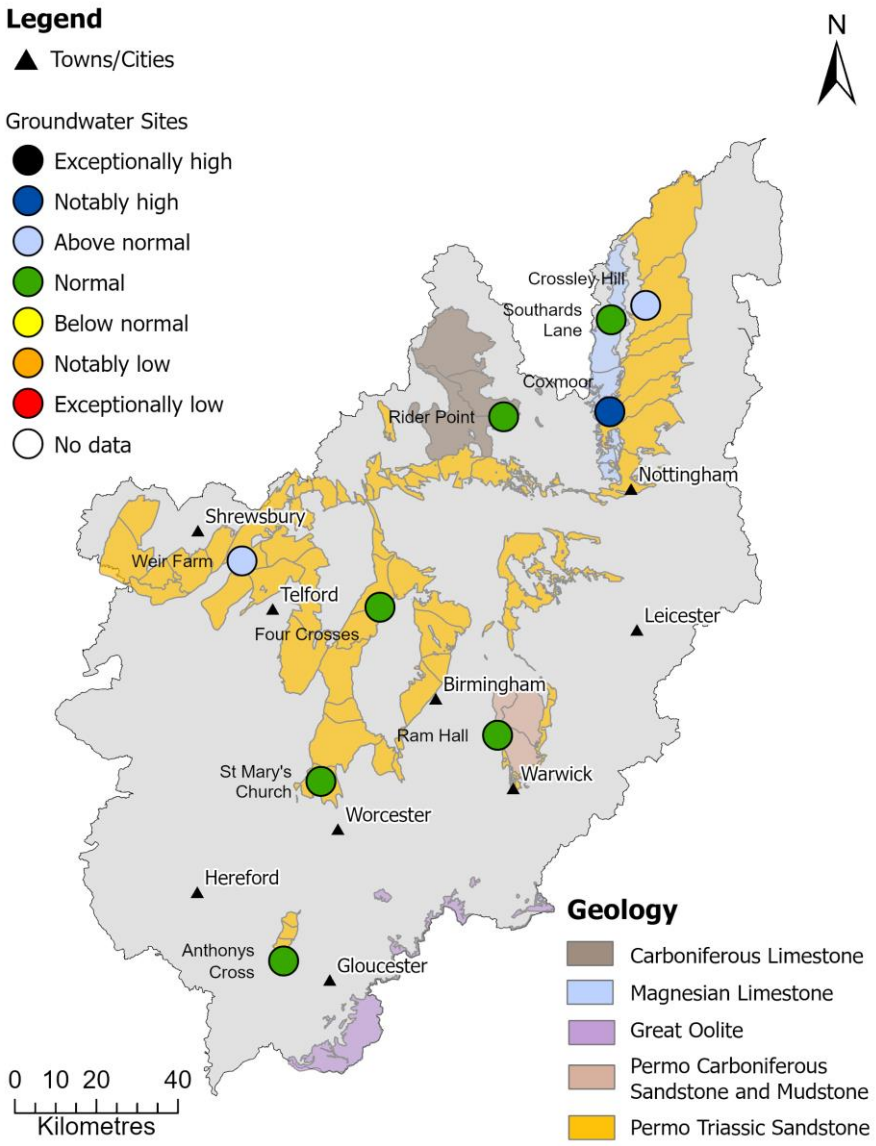

WORKSOP, River Ryton
Ranking used data from 18/06/1970 to 31/12/2020
Daily Mean Flow (cumecs)
0
0.5
1
1.5
2
2.5
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25


YOXALL, River Trent
Ranking used data from 01/10/1959 to 31/12/2022
Daily Mean Flow (cumecs)
0
10
20
30
40
50
30-Sep-24
30-Nov-24
31-Jan-25
31-Mar-25
31-May-25
31-Jul-25
30-Sep-25

5 Groundwater levels

5.1 Groundwater levels map

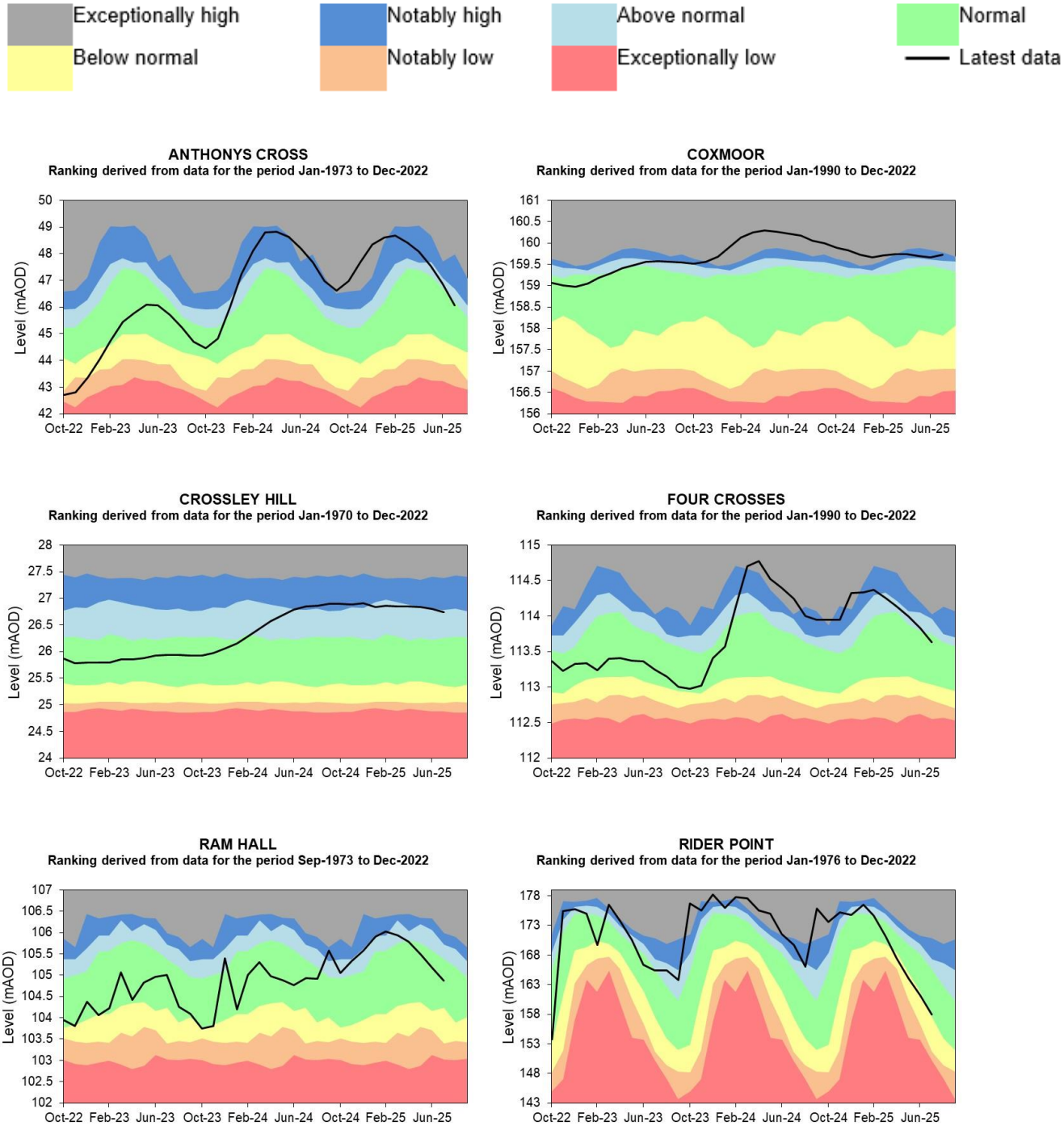
Figure 5.1: Groundwater levels for indicator sites at the end of [July 2025], classed relative to an analysis of respective historic July levels. Table available in the appendices with detailed information, including aquifer type.

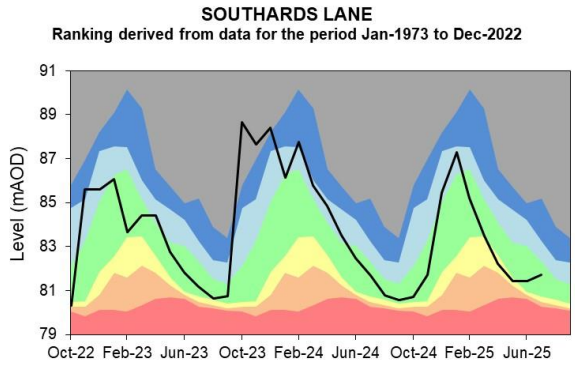


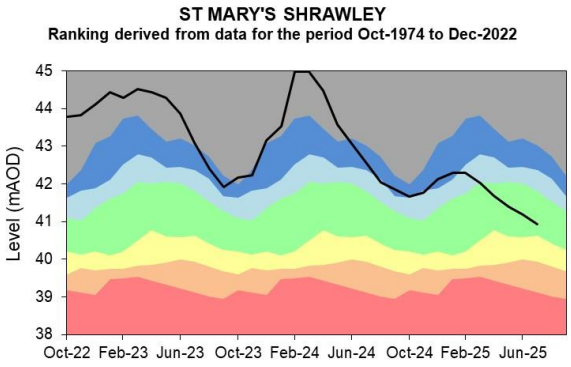
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

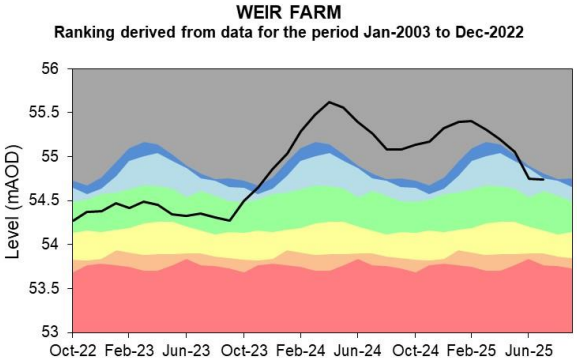
5.2 Groundwater level charts

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.





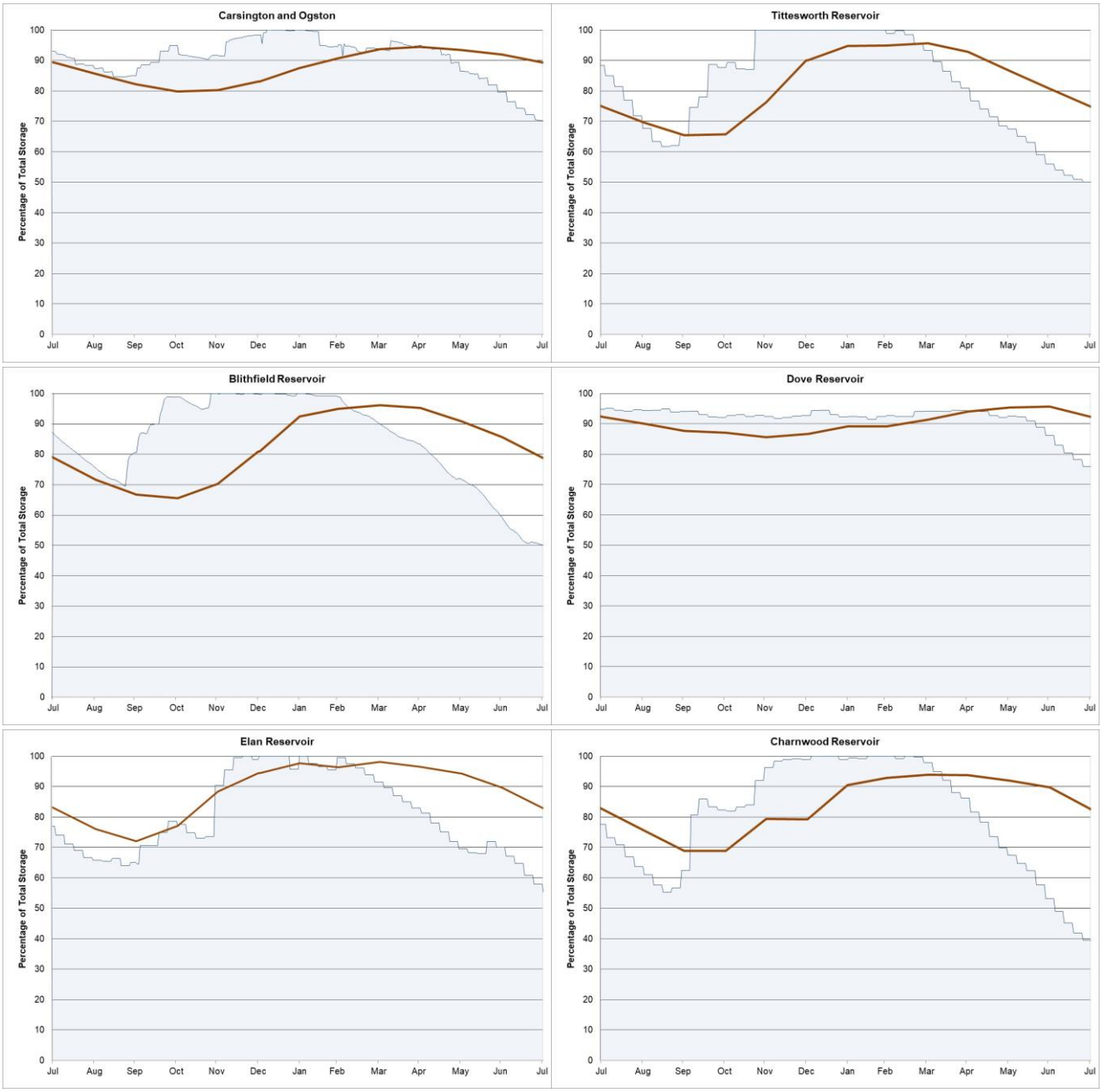




(Source: Environment Agency, 2025).

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

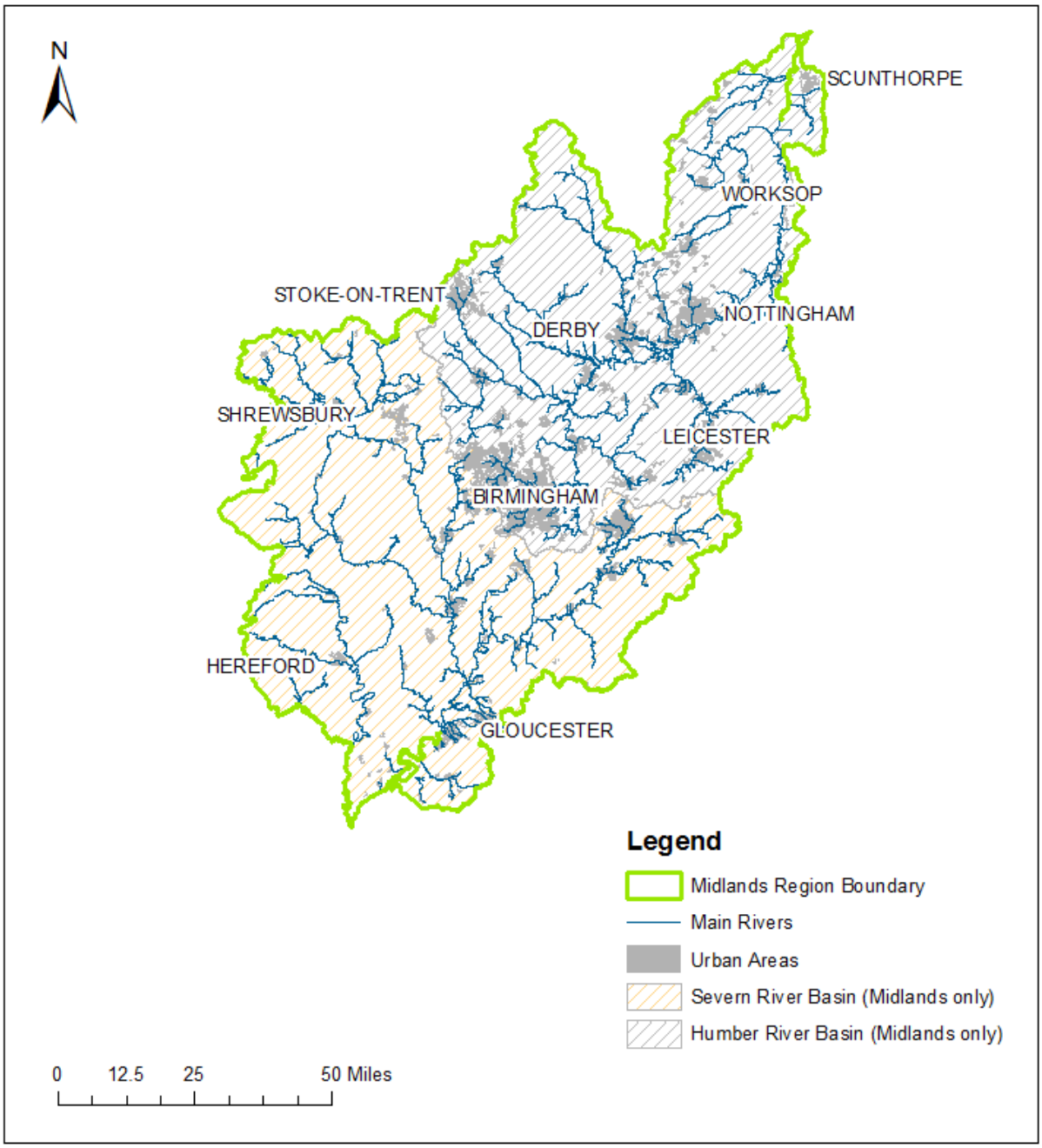
Value likely to fall within this band 8% of the time.

Exceptionally low

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

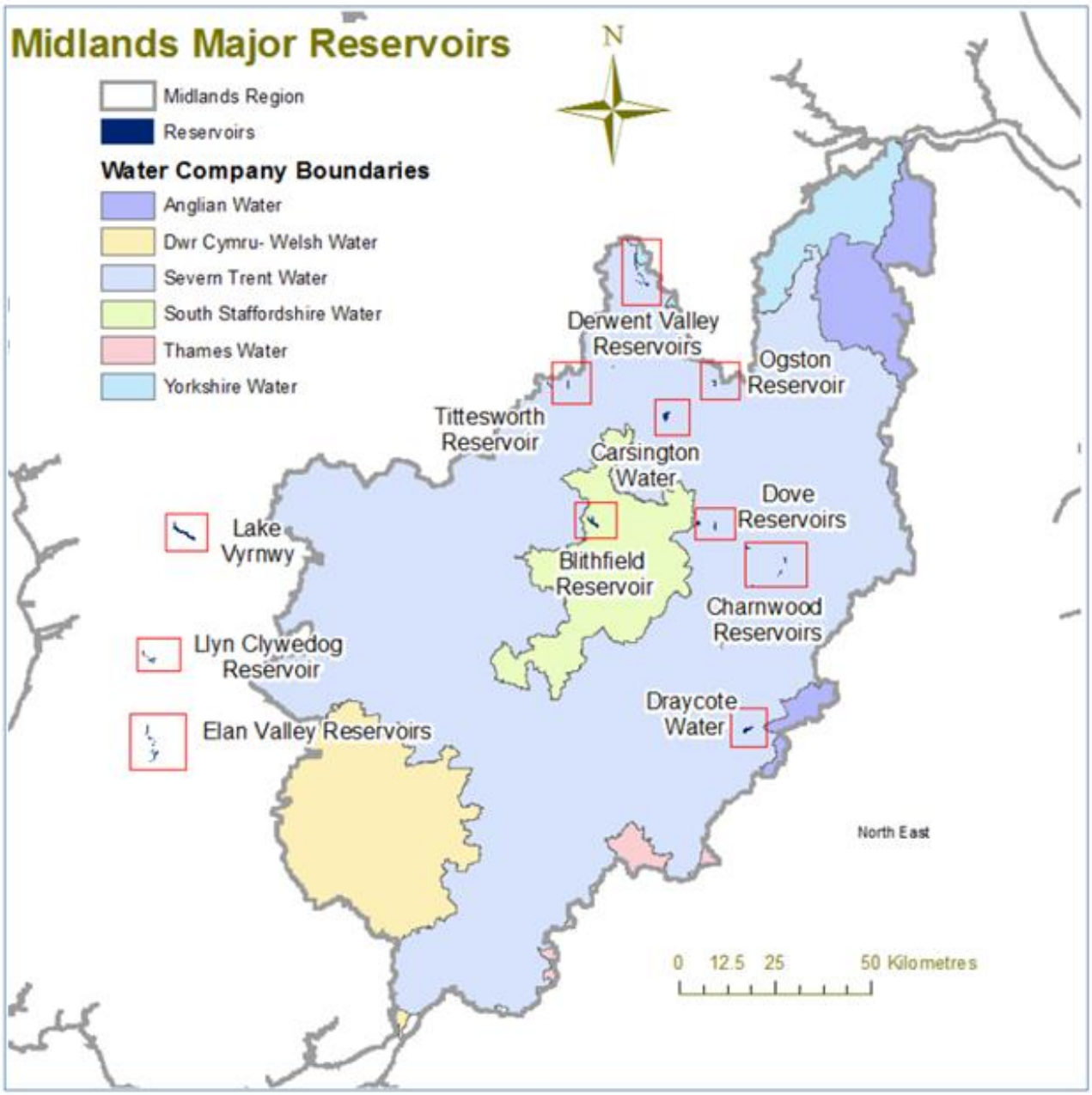
7.3 Midlands regional coverage

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 Wye at Ashford River Derwent at Derby St Mary's Rothley Brook at Rothley River Devon at Wensor Bridge River Trent at Colwick River Trent at North Muskham River Maun and River Meden at Perlethorpe and Whitewater Bridge River Ryton at Blyth River Torne at Auckley
West Midlands	River Arrow at Broom River Avon at Evesham Badsey Brook at Offenham Bow Brook at Besford Bridge River Dene at Wellesbourne River Stour and Wimpstone River Churnet at Quixhill River Trent at North Muskham River Severn at Bewdley

	River Severn at Deerhurst
	Glynch Brook at Bromsberrow
	River Leadon at Wedderburn Bridge
	Coley Brook at Coley Mill
	River Meese at Tibberton
	River Perry at Yeaton
	River Rea at Hookagate/Rea
	River Rea at Hookagate/Cound
	River Roden at Rodington
	River Strine at Crudgington
	River Tern at Ternhill on Tern
	River Tern at Walcot
	River Penk at Penkridge
	River Sow at Great Bridgford
	River Swarbourn at Wychnor / Meadow Lane
	River Trent at Yoxall
	River Trent at Darlaston
	River Cole at Coleshill
	River Mease at Clifton Hall
	River Trent at Drakelow
	River Teme at Knightsford Bridge
	River Teme at Tenbury
	River Afon Tanat at Llanyblodwel
	Borle Brook at Dowles Brook at Oak Cottage

	River Salwarpe at Harford Hill River Stour at Puxton River Worfe at Burcote 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 River Lugg at Butts Bridge River Frome at Yarkhill

8.2 Rainfall table

Hydrological area	Jul 2025 rainfall % of long term average 1991 to 2020	Jul 2025 band	May 2025 to July cumulative band	Feb 2025 to July cumulative band	Aug 2024 to July cumulative band
Avon To Evesham	81	Normal	Notably low	Exceptionally low	Normal
Derwent (Midlands)	81	Normal	Below normal	Exceptionally low	Below normal
Dove	85	Normal	Below normal	Exceptionally low	Below normal

Lower Severn Estuary	58	Below Normal	Exceptionally low	Exceptionally low	Normal
Lower Trent	97	Normal	Below normal	Exceptionally low	Normal
Lower Wye	52	Below Normal	Exceptionally low	Exceptionally low	Normal
Mid Severn	48	Below Normal	Exceptionally low	Exceptionally low	Normal
Shropshire Plains	65	Below Normal	Notably low	Exceptionally low	Normal
Soar	85	Normal	Notably low	Exceptionally low	Normal
Tame	84	Normal	Notably low	Exceptionally low	Normal
Upper Trent	80	Normal	Below normal	Exceptionally low	Normal
Welsh Mountains	62	Below Normal	Normal	Exceptionally low	Below normal

8.3 River flows table

Site name	River	Catchment	Jul 2025 band	Jun 2025 band
Auckley	Torne	Torne	Notably low	Notably low
Bewdley	Severn	Severn Lower Mid	Notably low	Normal
Butts Bridge	Lugg	Lugg	Exceptionally low	Exceptionally low
Clifton Hall	River Mease	Mease	Below normal	Below normal
Deerhurst	Severn	Severn Lower	No data	Below normal
Derby St. Marys	Derwent	Derwent Der to Markeaton con	Notably low	Exceptionally low
Ebley Mill	Frome (glos)	Frome Gloucs	Exceptionally low	Exceptionally low
Evesham	Avon (mi)	Avon Warwks Lower	Normal	Normal
Great Bridgford	Sow	Sow Upper	Notably low	Notably low
Kegworth	Soar	Soar to Kingston Brook confl	Below normal	Notably low
Llanyblodwel	Tanat	Severn Upper River Tanat	Normal	Normal
Marston On Dove	Dove (mi)	Dove Derb to Hilton Br confl	Notably low	Exceptionally low

North Muskham	Trent	Trent to Cromwell	Below normal	Exceptionally low
Redbrook	Wye (herefordshire)	Wye H and W d s Lugg	Exceptionally low	Normal
Stareton	Avon (mi)	Avon Warwks Upper	Normal	Below normal
Tenbury	Teme	Teme	Exceptionally low	Exceptionally low
Walcot	Tern	Tern	Below normal	Below normal
Wedderburn Bridge	Leadon	Leadon	No data	No data
Whatstandwell	Derwent	Derwent Derb to Amber conf	Exceptionally low	Notably low
Worksop	Ryton	Ryton Upper to Oldcoates Dyke	Normal	No data
Yoxall	Trent	Trent to Tame Mease confl	Below normal	Notably low

8.4 Groundwater table

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