Monthly water situation report: Midlands

1 Summary - June 2025

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

Rainfall - In June, all Midlands hydrological catchments received less than 75% of their long term average (LTA) rainfall, except for the Welsh Mountains. The amount of rainfall received varied across the region, with the driest in the east and wettest in the west.

Soil moisture deficit - Soil moisture deficit (SMD) across the Midlands has largely decreased in June meaning soils have become drier. By the end of the month, soils remain drier than expected for the time of year.

River flows - In June, 7 sites recorded exceptionally low, 5 sites recorded notably low, 3 sites recorded below normal and 4 sites recorded normal monthly mean flows. No data is available for Worksop and Wedderburn Bridge.

Groundwater levels - As of the end of June, the majority 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 May.

Reservoir stocks - By the end of June, most Midlands reservoirs had below average storage compared to the LTA with Tittesworth, Blithfield, Charnwood and Derwent below 60% storage.

1.1 Rainfall

In June, all Midlands hydrological catchments received less than 75% of their LTA rainfall, except for the Welsh Mountains. The Welsh Mountains received above normal rainfall at 115% of the LTA. The Mid Severn, Lower Wye and Lower Severn catchments in the western half of the Midlands received normal rainfall totals relative to the LTA. Seven hydrological catchments received below normal rainfall totals ranging from 31% to 57% of the LTA. These were the Shropshire Plains, Upper Trent, Dove, Derwent, Lower Trent, Tame and Avon catchments, largely situated in the eastern half of the Midlands. Only 1 catchment, the Soar, received notably low rainfall totals relative to the LTA.

Over the last 3 months, 7 hydrological catchments in the Midlands received exceptionally low rainfall totals ranging from 41% to 54% of their 3 month LTA. Among them, the Lower Trent and Avon catchments recorded their driest 3 month cumulative rainfall totals since records began. The remaining 5 catchments also recorded 3 month cumulative rainfall totals that were ranked within the top 8 driest.

Over the last 6 months, all catchments either received exceptionally low or notably low cumulative rainfall totals relative to their 6 month LTA. Catchments in the eastern half of the Midlands were drier than catchments in the western half of the Midlands.

Looking at the last 12 months' rainfall total combined, rainfall has been normal for the majority of the catchments in Midlands. The only exception being the Derwent which recorded below normal cumulative rainfall total of 85% of the 12 month LTA.

1.2 Soil moisture deficit and recharge

Soil moisture deficit across the Midlands has largely decreased since last month meaning soils have become drier. With the exception of the Welsh Mountains, 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.

By the end of June, 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 June, 7 sites recorded exceptionally low monthly mean flows ranging from 26% to 52% of the LTA. These were Marston on Dove, Derby St Marys, North Muskham, Tenbury, Butts Bridge, Deerhurst and Ebley Mill flow sites. Five sites recorded notably low monthly mean flows. These were Great Bridgeford, Yoxall, Whatstandwell, Kegworth and Auckley situated in the north and north eastern patch of the Midlands. A further 3 sites, Walcot, Clifton Hall and Stareton recorded below normal. The remaining 4 sites recorded normal monthly mean flows. These were Llanyblodwel, Bewdley, Evesham and Redbrook.

Wedderburn Bridge has been showing unreliable data from September 2024 onwards, therefore, data has been removed from this report. No data is available for Worksop due to ongoing instrument issues at the site.

1.4 Groundwater levels

As of the end of June, the majority of the Midlands groundwater sites recorded normal or higher groundwater levels compared to the LTA. The exception being Rider Point on the Carboniferous limestone which recorded below normal groundwater levels relative to the LTA. Southards Lane, St Mary's Church and Ram Hall recorded normal groundwater levels by the

end of June. A further 3 sites, Weir Farm, Four Crosses and Anthony's Cross recorded above normal groundwater levels. The remaining 2 sites, Crossley Hill and Coxmoor on the Permo Triassic Sandstone in the north east, recorded notably high groundwater levels by the end of June.

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

1.5 Reservoir stocks

By the end of June, the majority of the Midlands reservoirs had below average storage compared to the LTA. In particular, Tittesworth, Blithfield, Charnwood and Derwent reservoirs had below 60% storage by the end of June.

The majority of reservoirs in the Midlands experienced a reduction in storage since last month. However, Clywedog and Vyrnwy reservoirs in Wales had an increase in storage, likely due to the rainfall across the region. Storage for Elan Valley Reservoirs remained the same as last month.

1.6 Environmental impact

East Midlands Area moved to prolonged dry weather (PDW) incident status on 15 May 2025 whilst West Midlands moved on 21 May 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 June, there have been 16 days of Severn Regulation so far.

Table 1.1: River Severn operational releases as of 30 June 2025

Water supply (Ml/d)	Total releases	Normal releases	Regulation releases	Flood drawdown releases
Llyn Clywedog	100 Ml/d	18 Ml/d	82 Ml/d	0 Ml/d
Lake Vyrnwy	22 Ml/d	22 Ml/d	0 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 June.

For all of June, storage in the Ellan Valley reservoirs was below the release control line. In addition, for the majority of June, the flows at Rebdrook gauging station were below the regulation threshold. Between 15 June and 20 June, flows at Redbrook gauging station were above the regulation threshold but regulation releases were still in operation due to the 'agreed 7 day delay to reducing releases to the licensed compensation rate'.

1.9 Water abstraction restrictions

As of the end of June there were 73 water abstraction licence restrictions in place across the Midlands affecting 288 licences in total.

Please refer to table 8.1 for a full list of water abstraction licence restrictions.

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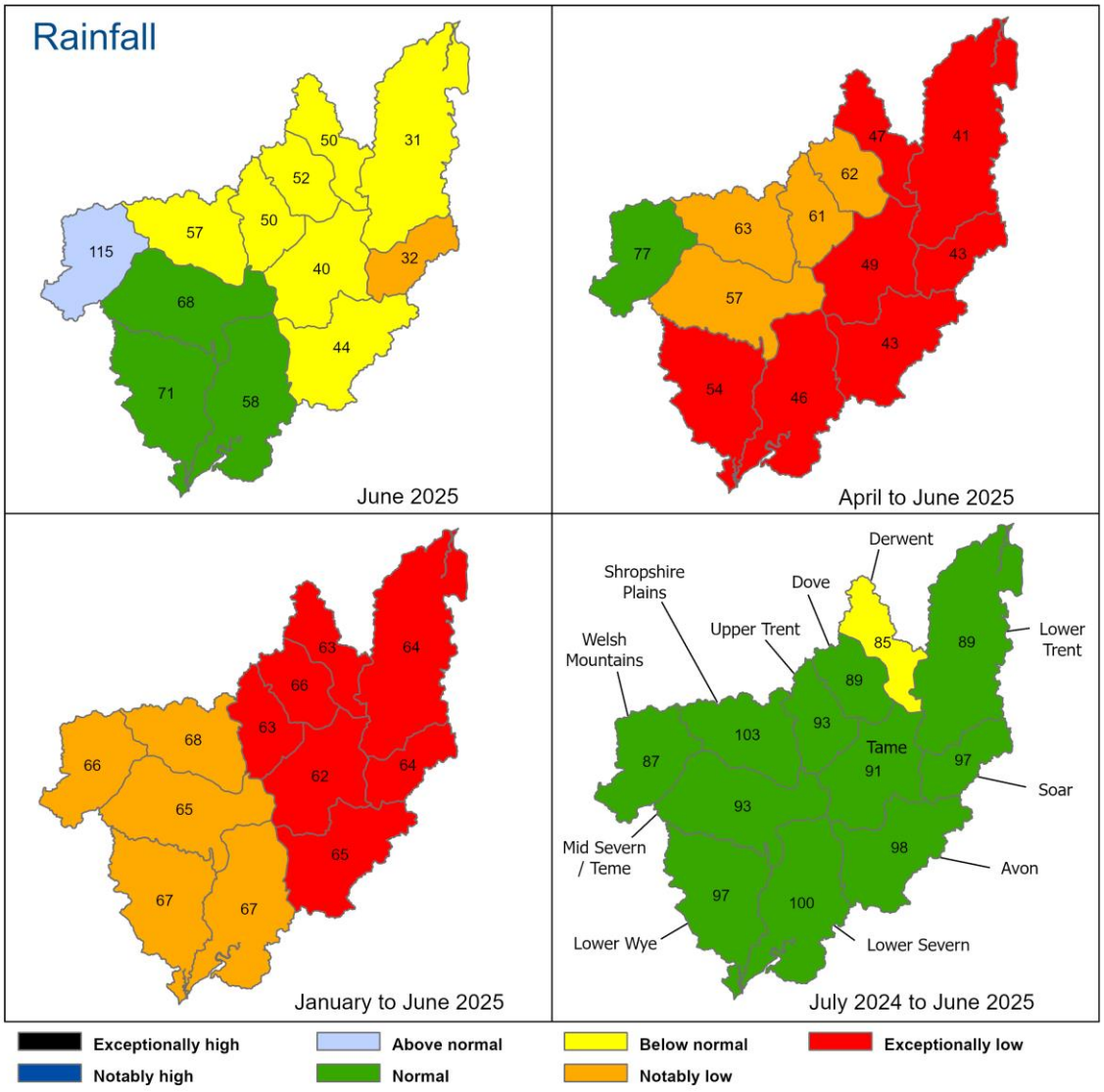
Contact Details: 03708 506 506

2 Rainfall

2.1 Rainfall map

Figure 2.1: Rainfall as % LTA for hydrological areas for the current month (up to 30 June 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.

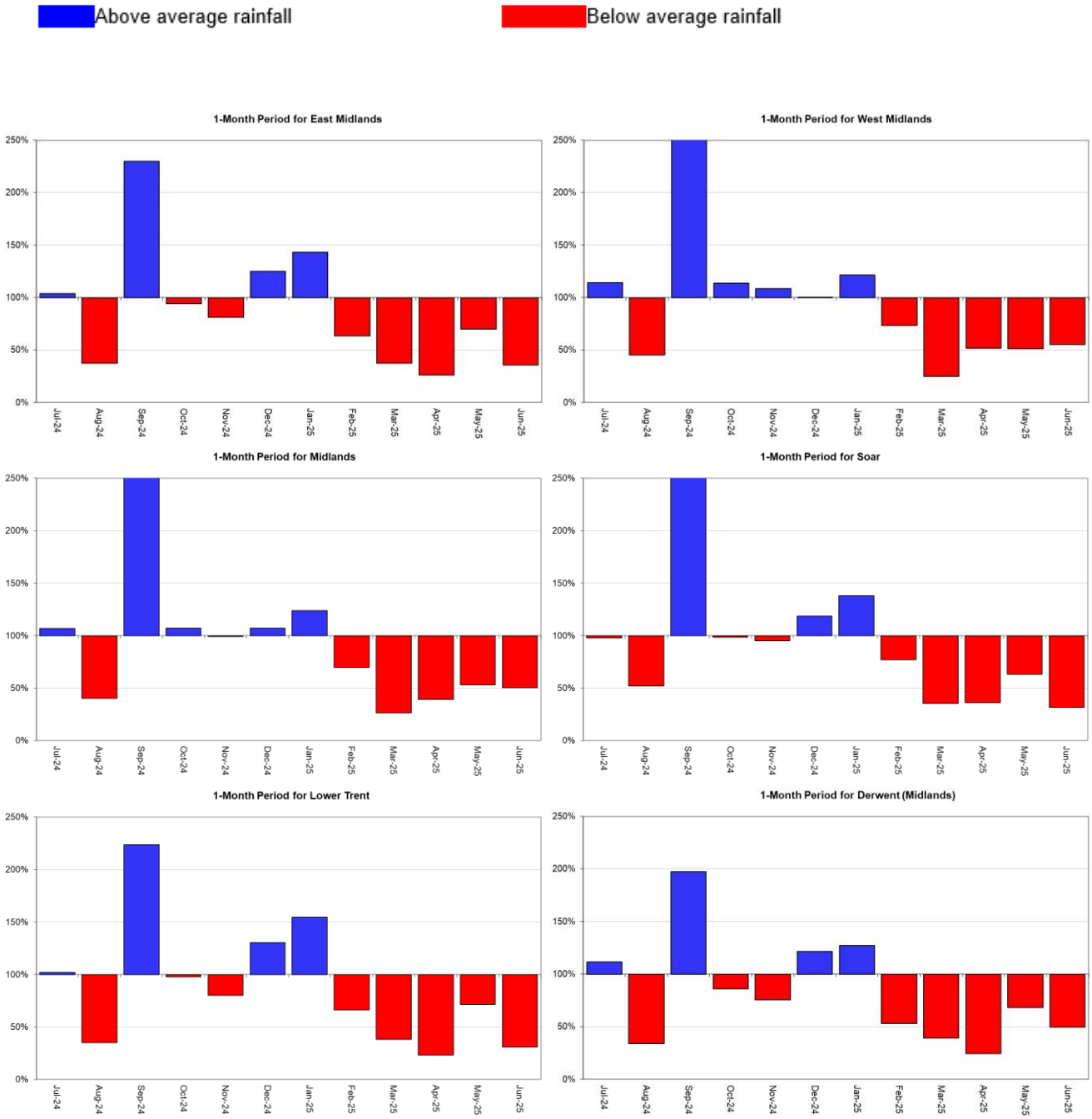


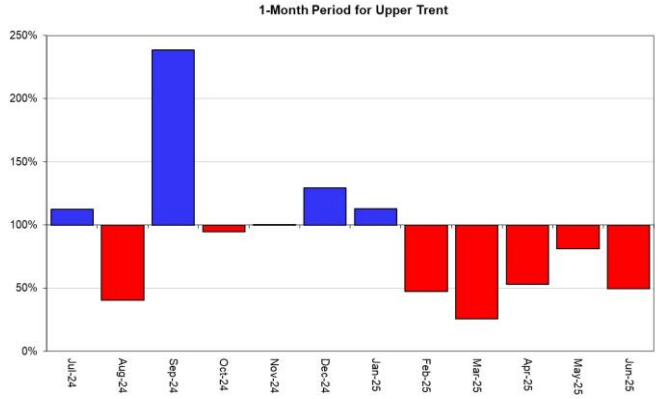
Rainfall data for Oct 2023 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to Oct 2023, extracted from

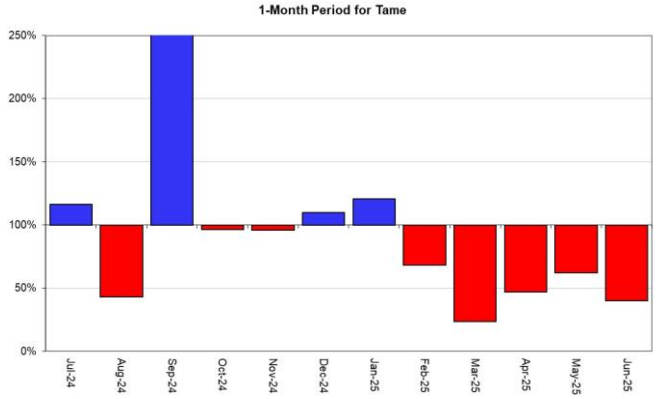
Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

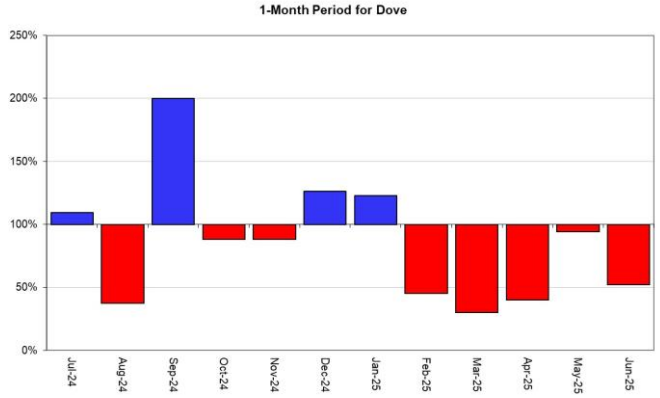
2.2 Rainfall charts

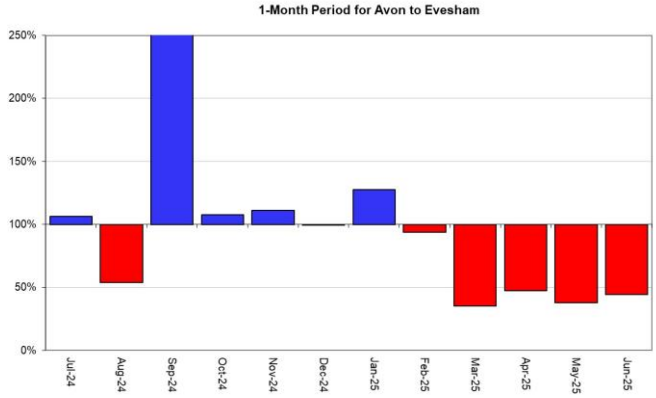
Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for hydrological areas across the Midlands region.

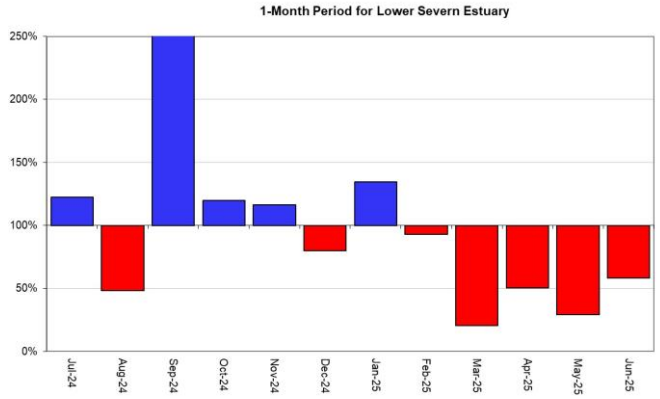


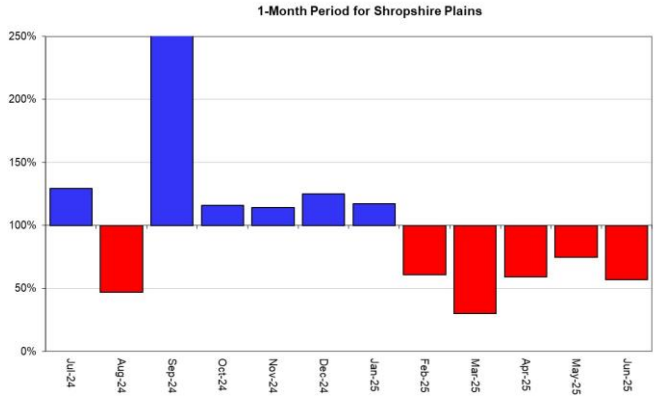

1-Month Period for Upper Trent
250%
200%
150%
100%
50%
0%
Jul-24
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25

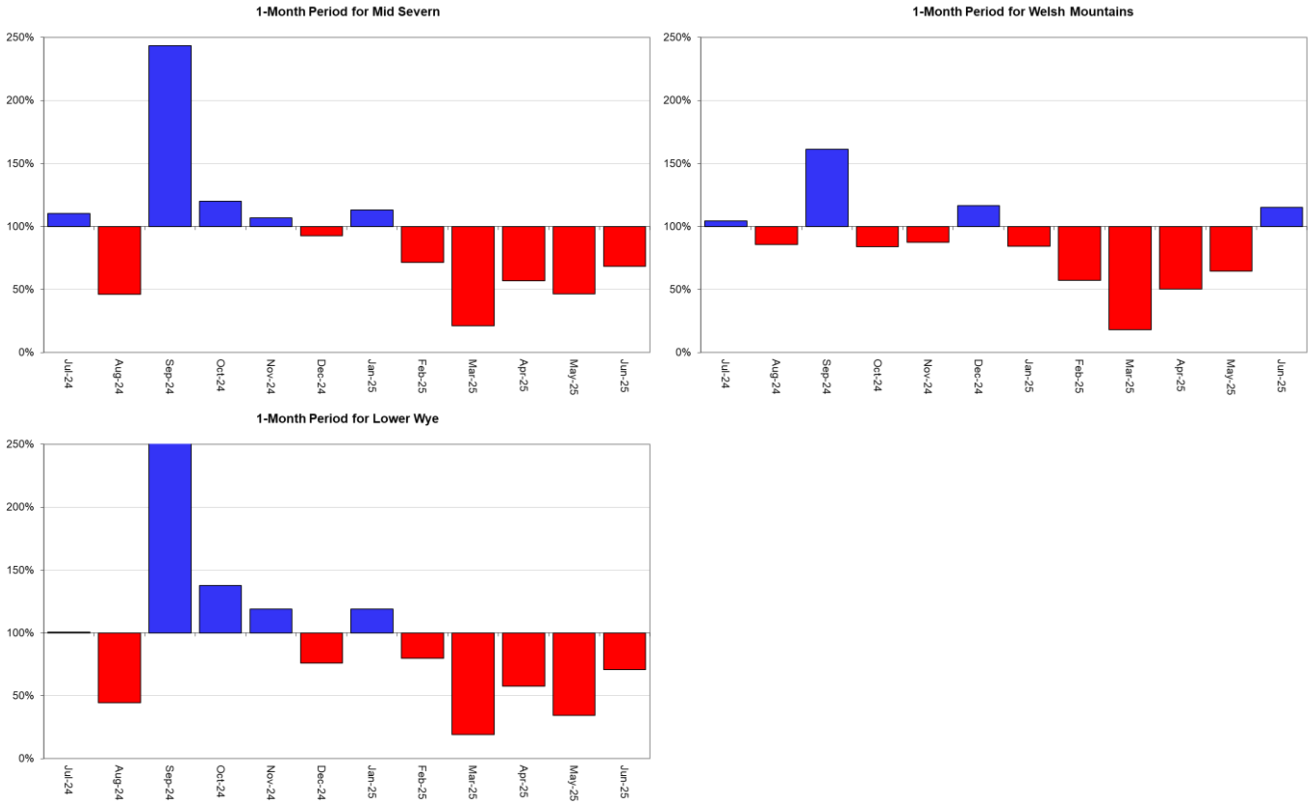

1-Month Period for Tame
250%
200%
150%
100%
50%
0%
Jul-24
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
Jun-25


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


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


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


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

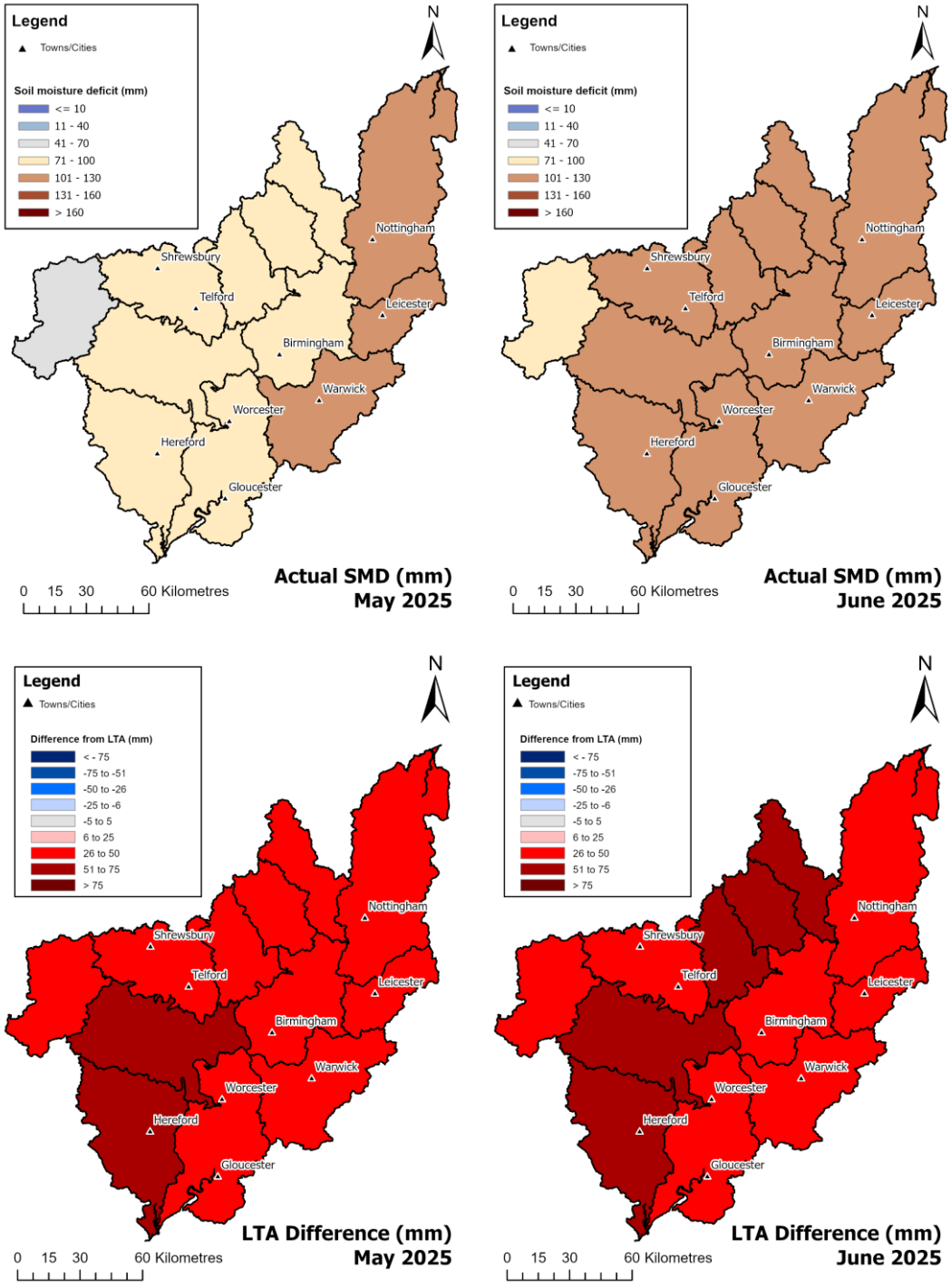


Rainfall data for Oct 2023 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2025). Rainfall data prior to Oct 2023, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2025).

3 Soil moisture deficit

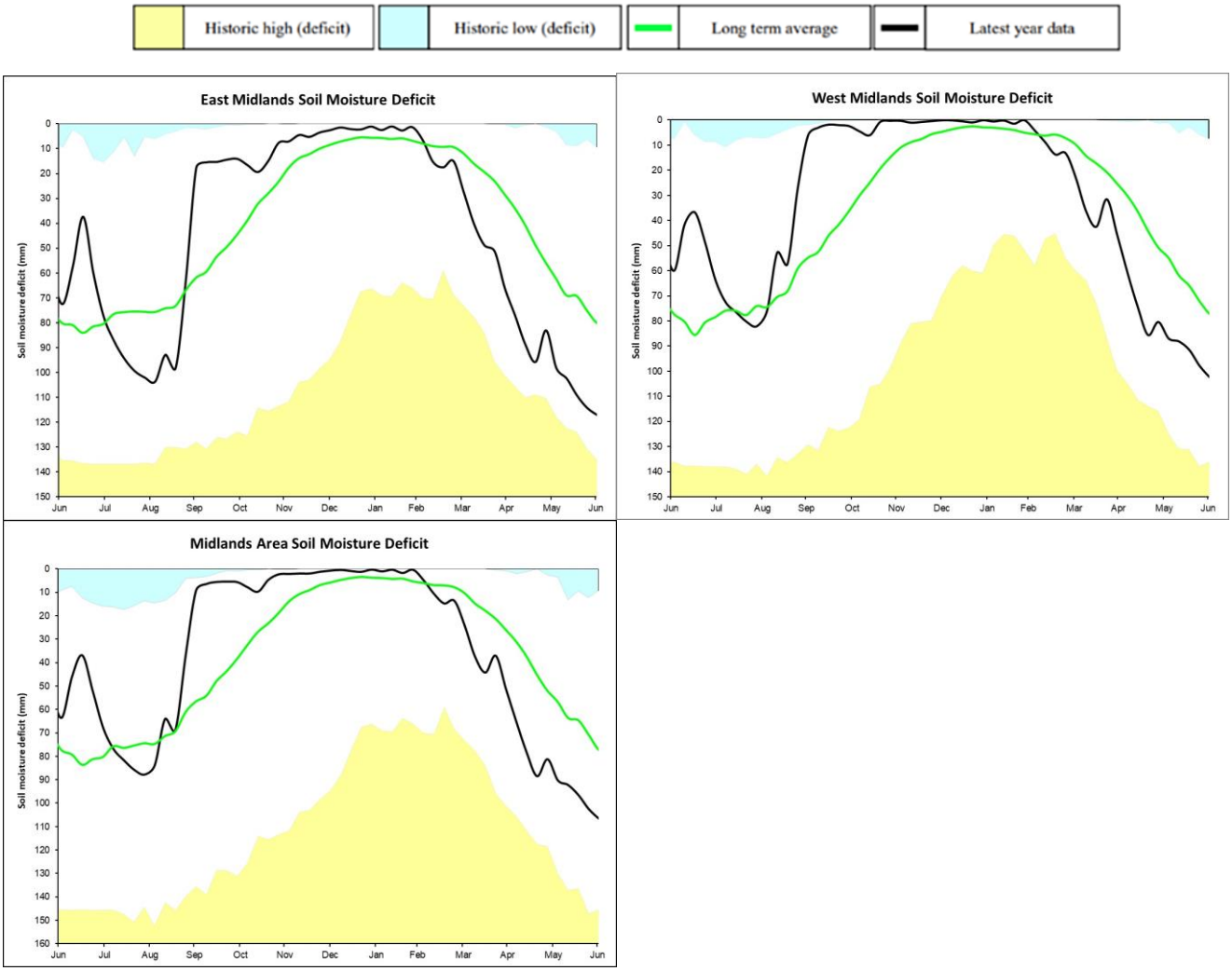
3.1 Soil moisture deficit map

Figure 3.1: Soil moisture deficits for weeks ending 30 June 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

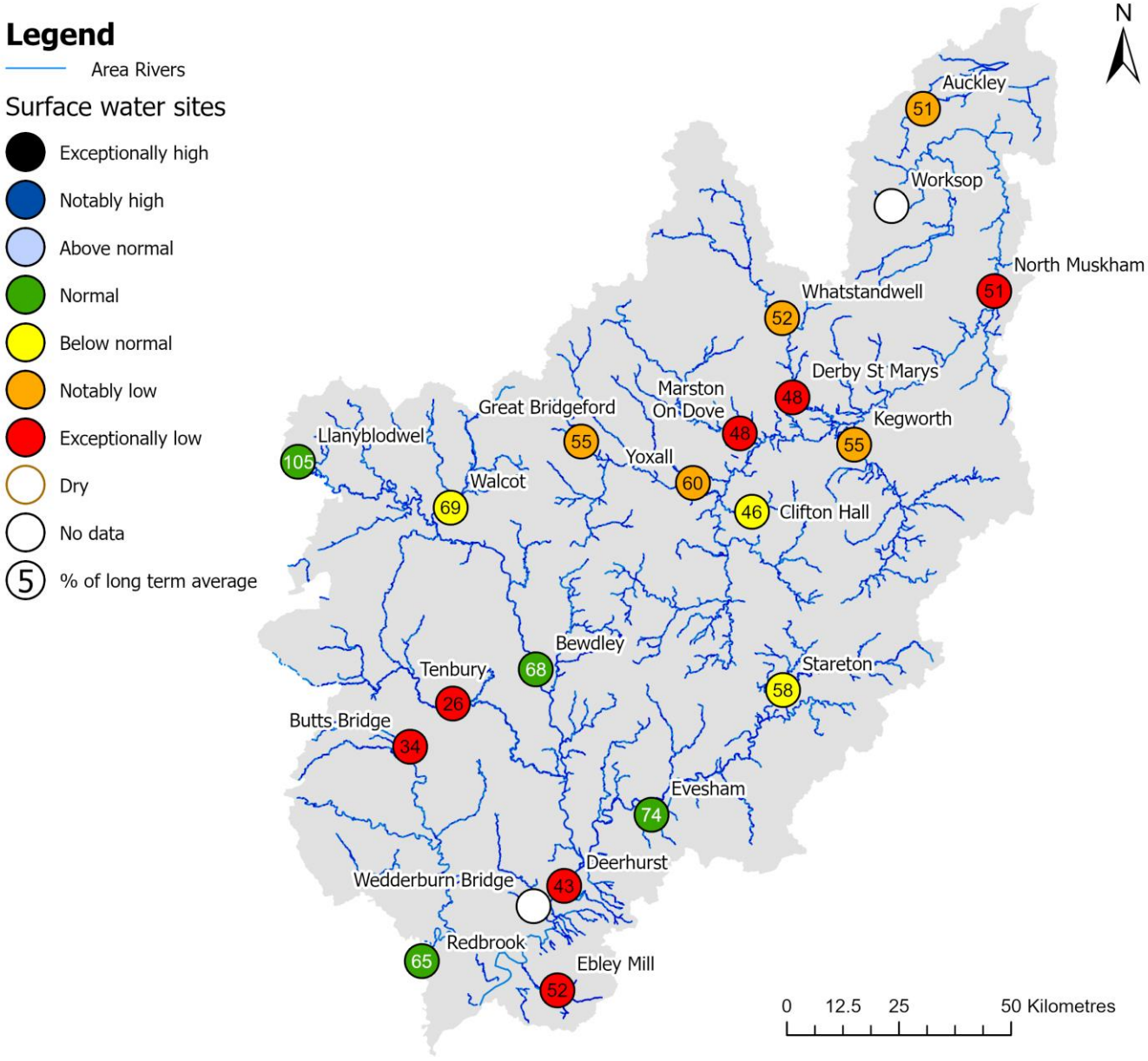
Figure 3.2: Latest soil moisture deficit charts for selected areas across the Midlands.



4 River flows

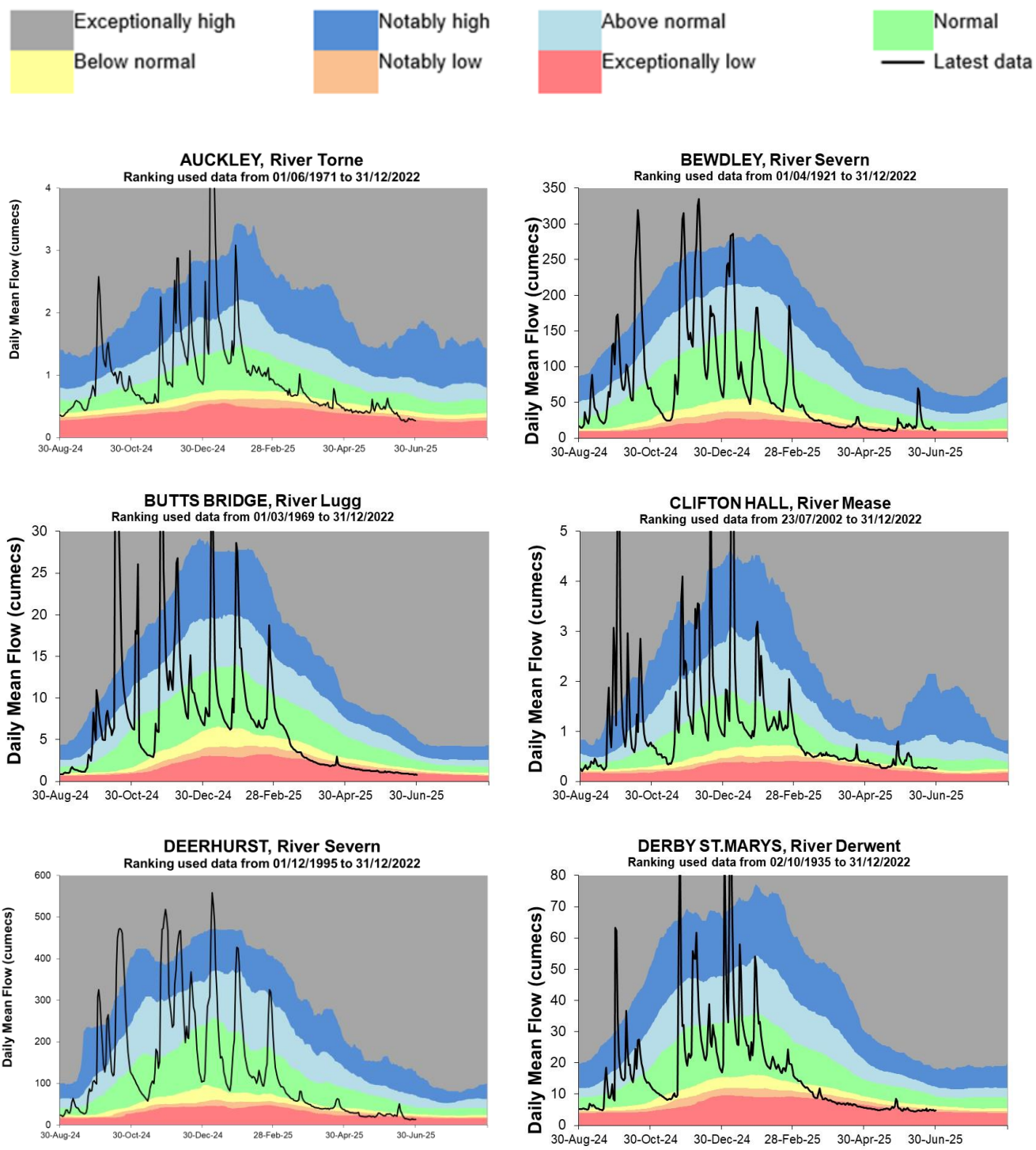
4.1 River flows map

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



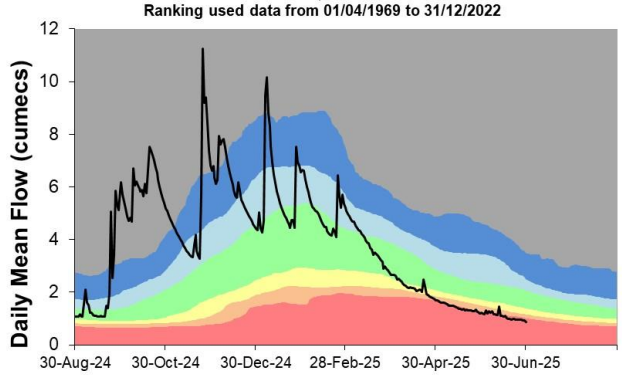
4.2 River flow charts

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.



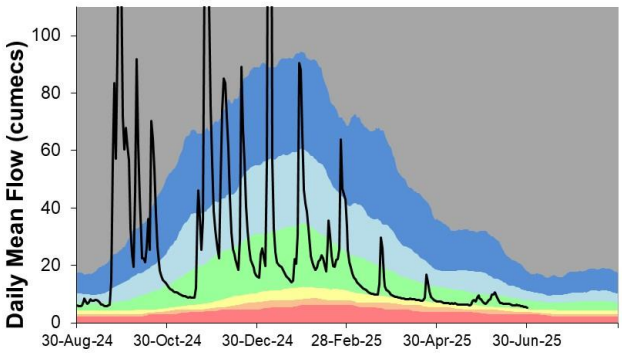
EBLEY MILL, River Frome

Ranking used data from 01/04/1969 to 31/12/2022



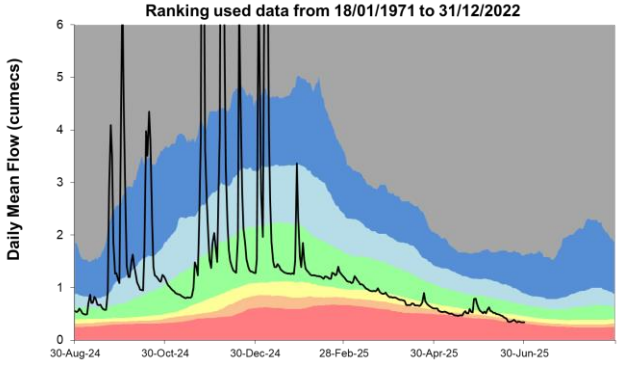
EVESHAM, River Avon

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



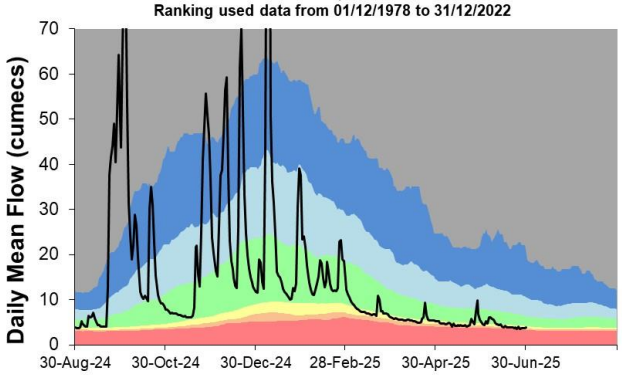
GREAT BRIDGFORD, River Sow

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



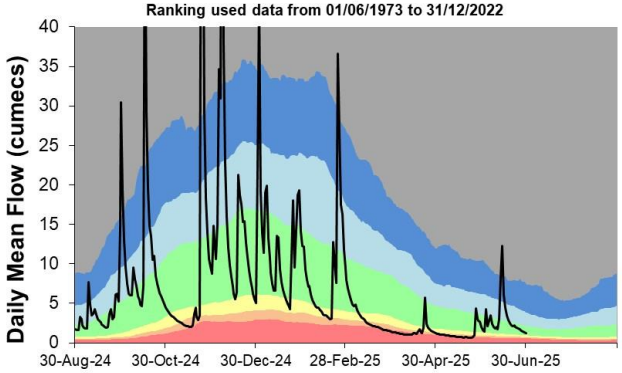
KEGWORTH, River Soar

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



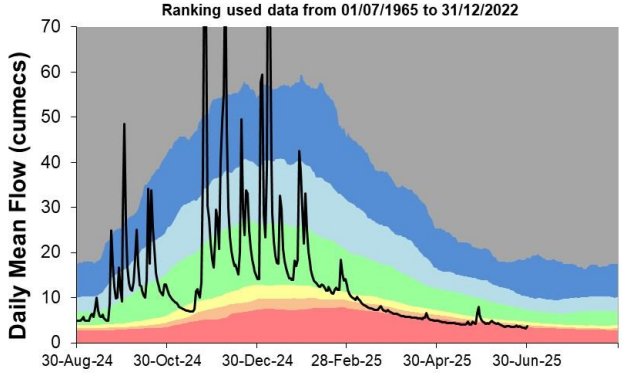
LLANYBLODWEL, Afon Tanat

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



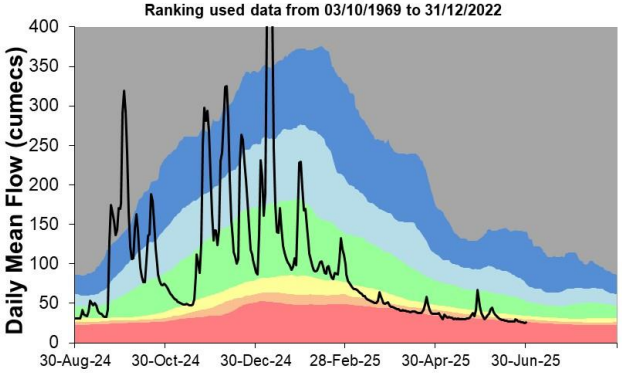
MARSTON ON DOVE, River Dove

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



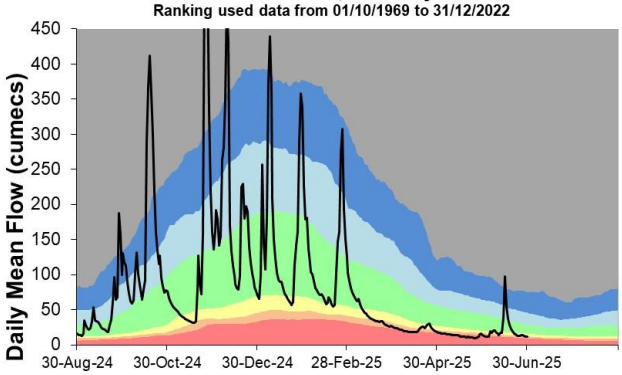
NORTH MUSKHAM, River Trent

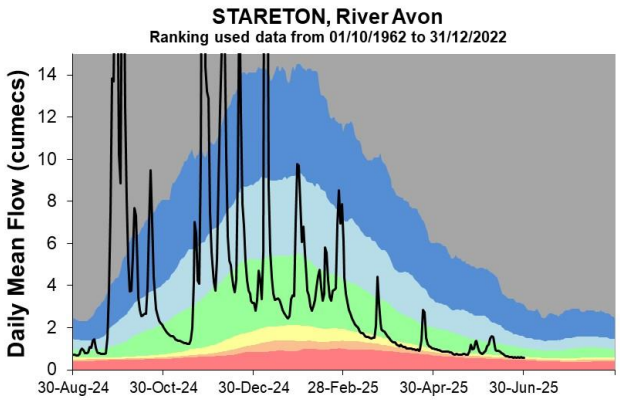
Ranking used data from 03/10/1969 to 31/12/2022

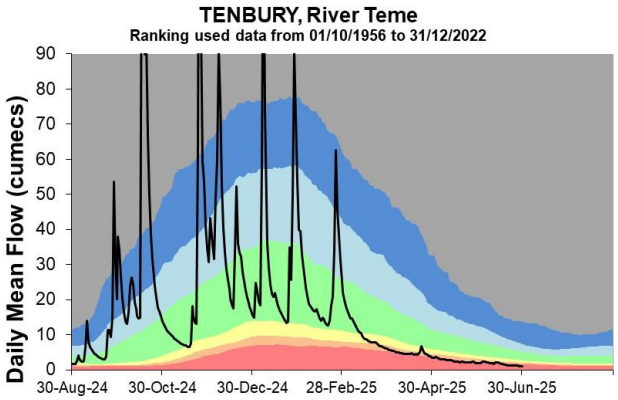


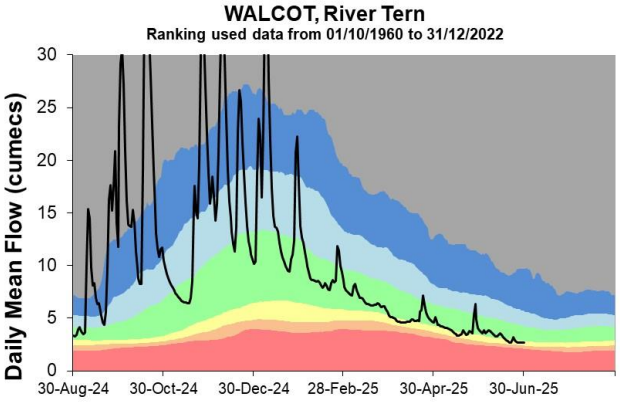
REDBROOK, River Wye

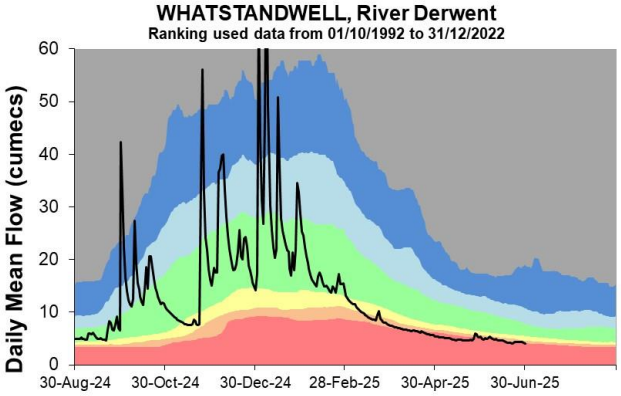
Ranking used data from 01/10/1969 to 31/12/2022

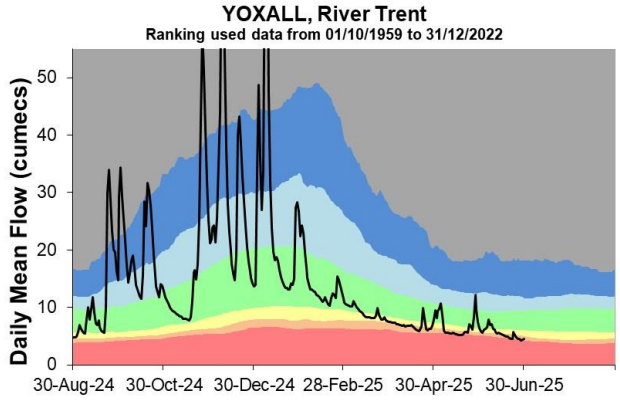



STARETON, River Avon
Ranking used data from 01/10/1962 to 31/12/2022
Daily Mean Flow (cumecs)
0
2
4
6
8
10
12
14
30-Aug-24
30-Oct-24
30-Dec-24
28-Feb-25
30-Apr-25
30-Jun-25


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-Aug-24
30-Oct-24
30-Dec-24
28-Feb-25
30-Apr-25
30-Jun-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-Aug-24
30-Oct-24
30-Dec-24
28-Feb-25
30-Apr-25
30-Jun-25

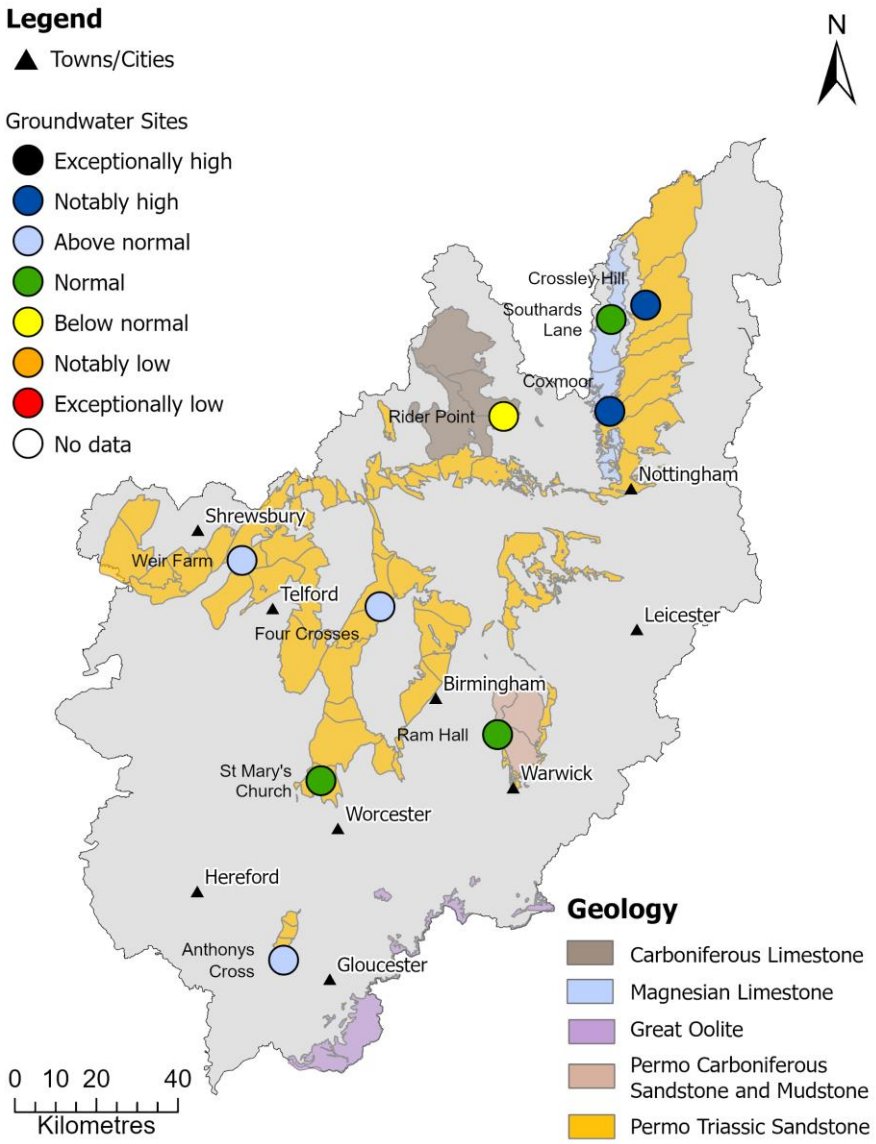

WHATSTANDWELL, River Derwent
Ranking used data from 01/10/1992 to 31/12/2022
Daily Mean Flow (cumecs)
0
10
20
30
40
50
60
30-Aug-24
30-Oct-24
30-Dec-24
28-Feb-25
30-Apr-25
30-Jun-25


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-Aug-24
30-Oct-24
30-Dec-24
28-Feb-25
30-Apr-25
30-Jun-25

5 Groundwater levels

5.1 Groundwater levels map

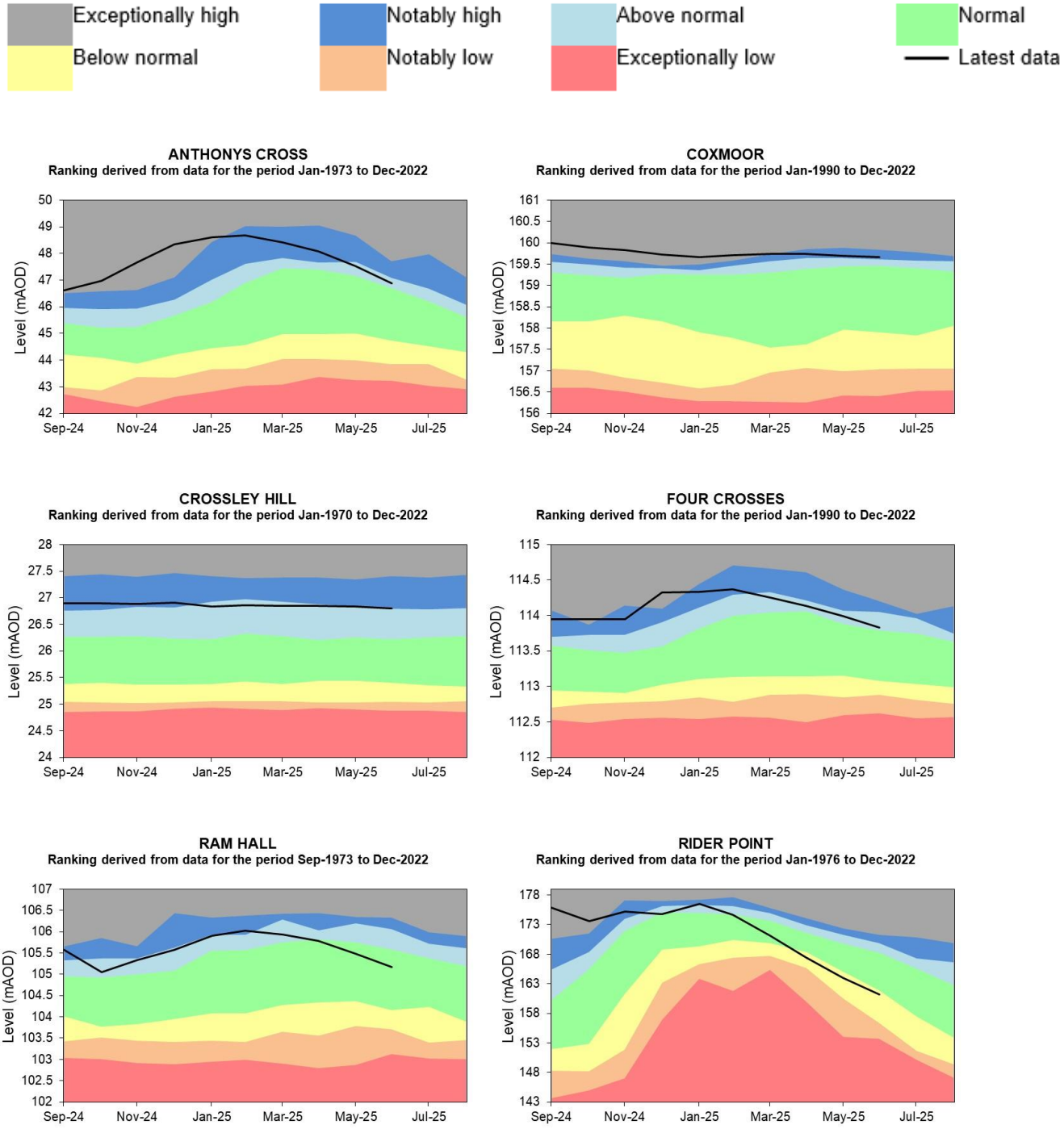
Figure 5.1: Groundwater levels for indicator sites at the end of June 2025, classed relative to an analysis of respective historic June levels. Table available in the appendices with detailed information, including aquifer type.

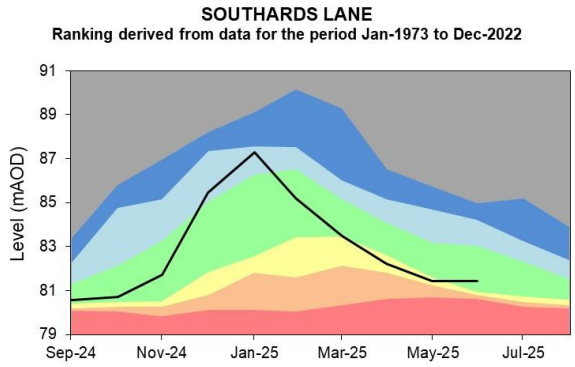


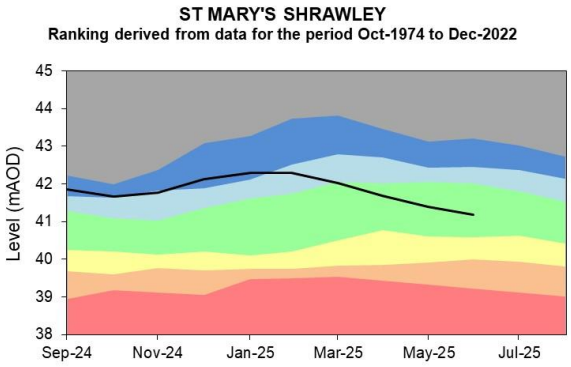
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2025.

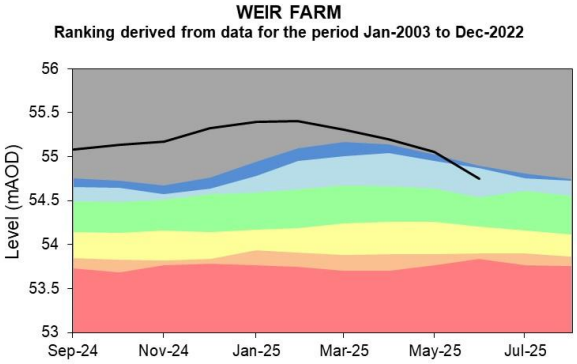
5.2 Groundwater level charts

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.





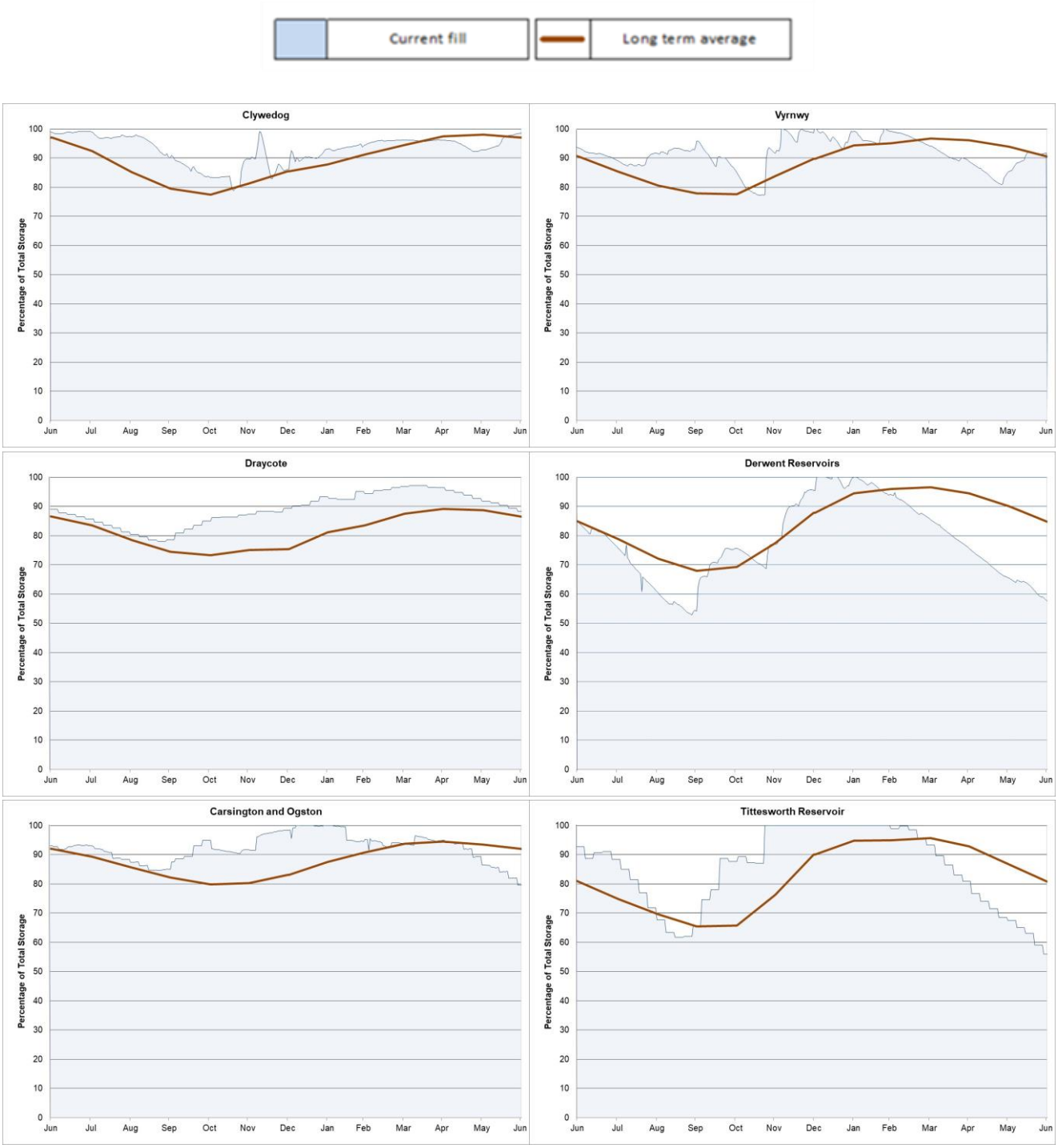


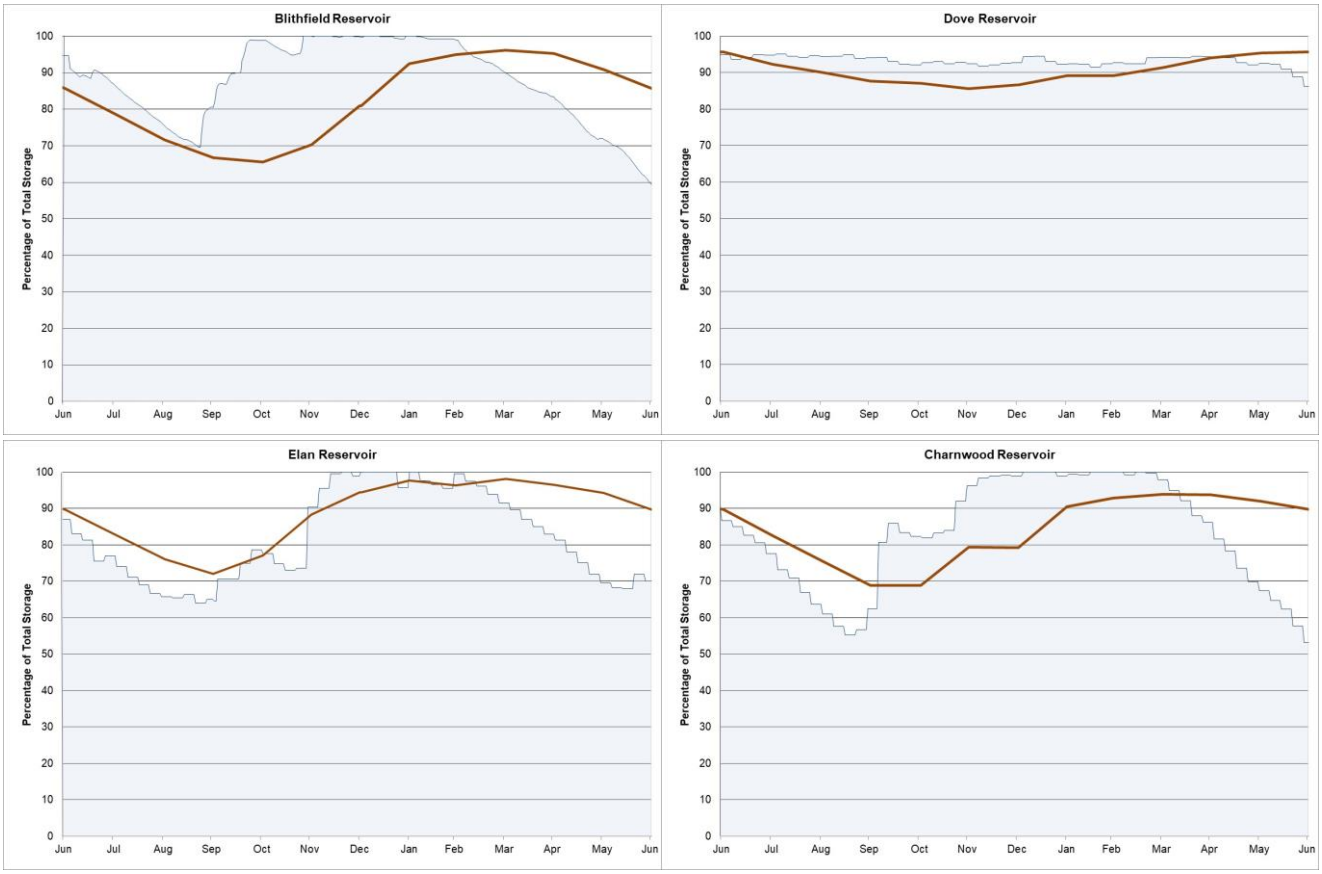


Source: Environment Agency, 2025.

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

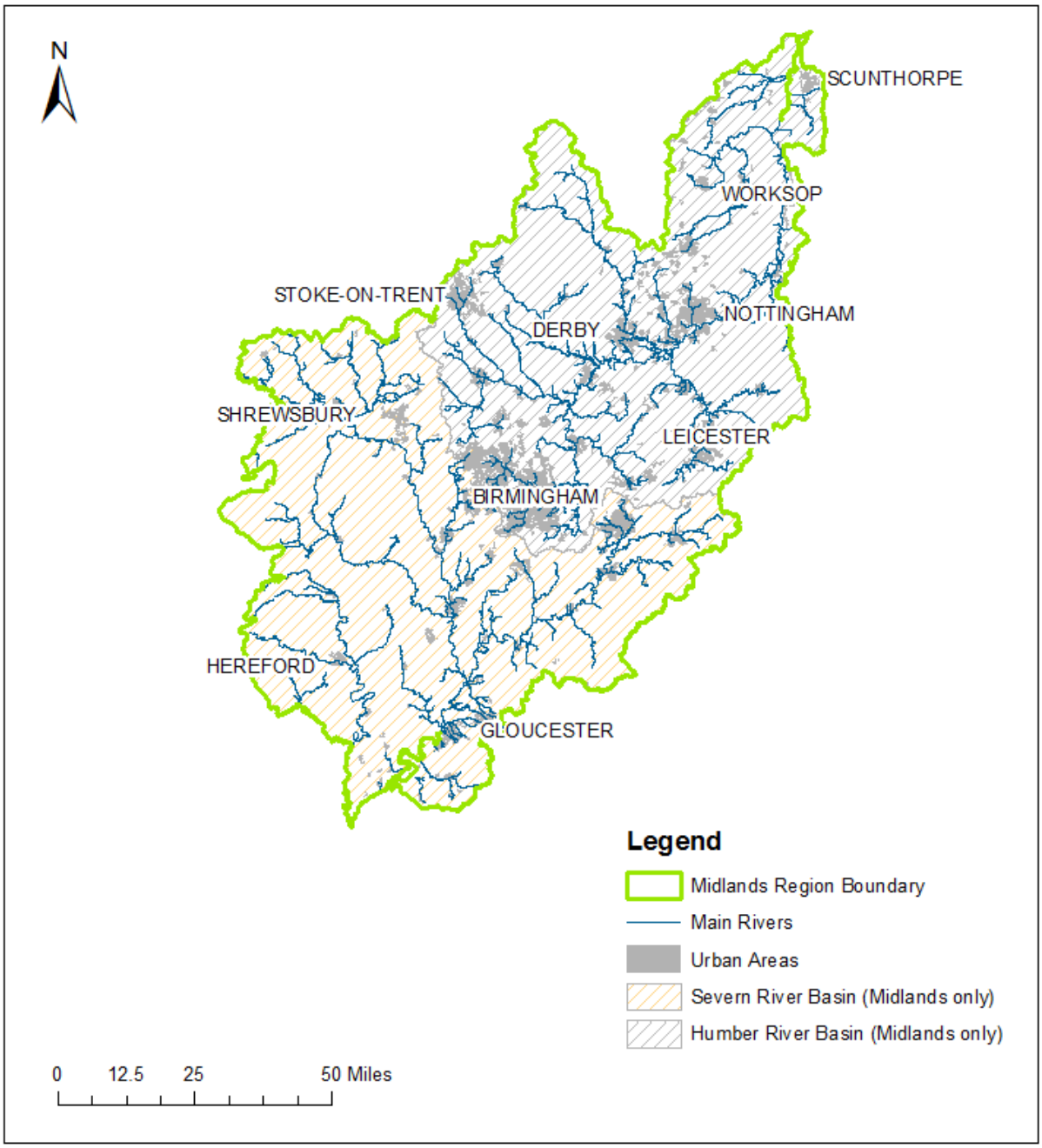
Value likely to fall within this band 8% of the time.

Exceptionally low

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

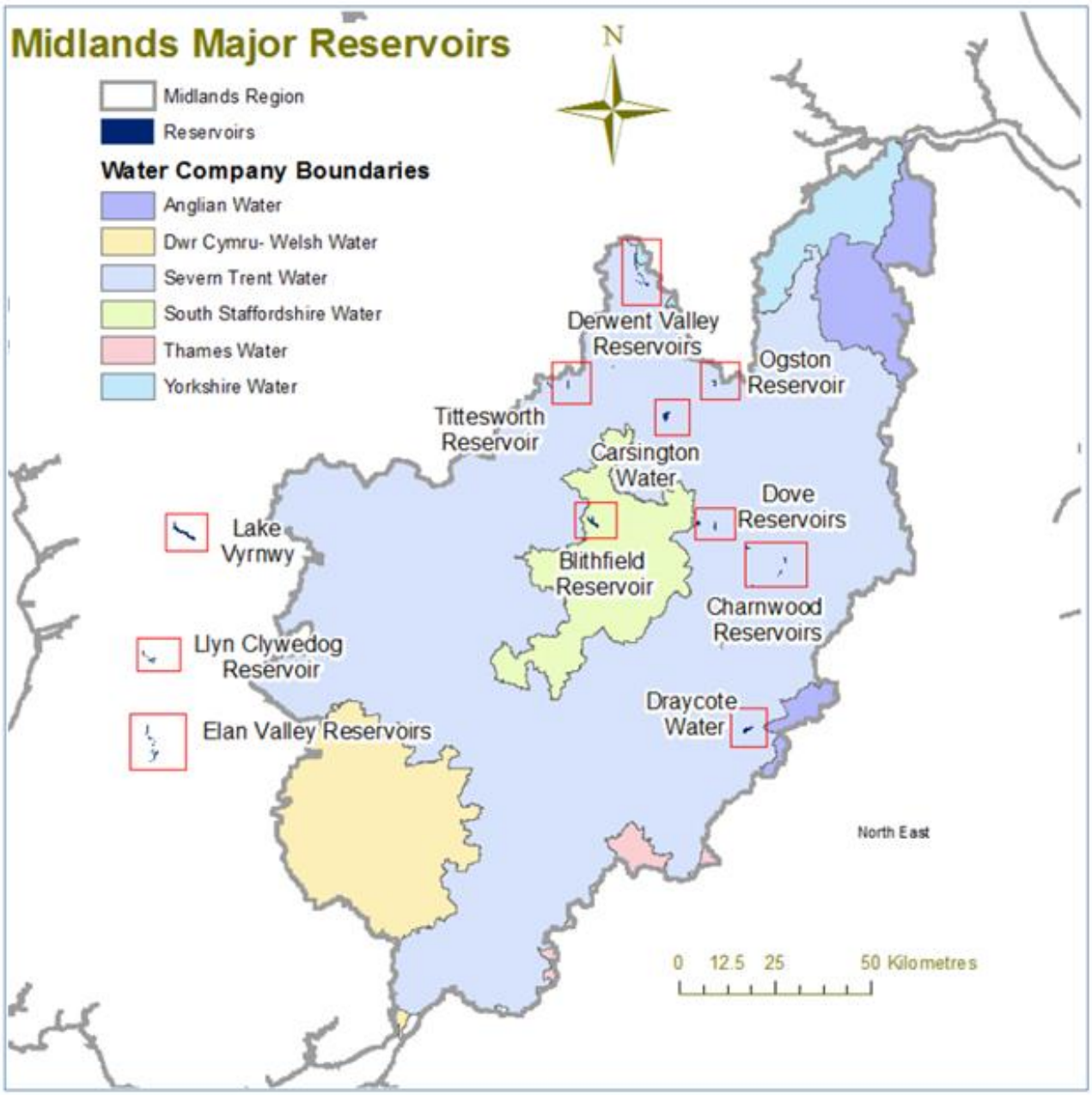
7.3 Midlands regional coverage

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 Soar at Littlethorpe River Soar at Kegworth River Erewash at Sandiacre 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 Stareton Badsey Brook at Offenham Bow Brook at Besford Bridge River Dene at Wellesbourne River Isbourne at Hinton on the Green River Stour at Wimpstone

	River Trent at North Muskham
	River Severn at Bewdley
	River Severn at Deerhurst
	River Leadon at Wedderburn Bridge
	Coley Brook at Coley Mill
	River Meese at Tibberton
	River Perry at Yeaton
	River Rea at Hookagate/Cound
	River Roden at Rodington
	River Strine at Crudgington
	River Tern at Ternhill on Tern
	River Tern at Walcot
	River Sow at Great Bridgford
	River Trent at Yoxall
	River Trent at Darlaston
	River Anker at Polesworth
	River Teme at Knightsford Bridge
	River Teme at Tenbury
	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 Lugg at Byton

	Lugg at Lugwardine Garren at Marstow Mill Wye at Redbrook Arrow at Titley Mill Lugg at Butts Bridge

8.2 Rainfall table

Hydrological area	Jun 2025 rainfall % of long term average 1991 to 2020	Jun 2025 band	Apr 2025 to June cumulative band	Jan 2025 to June cumulative band	Jul 2024 to June cumulative band
Avon To Evesham	44	Below Normal	Exceptionally low	Exceptionally low	Normal
Derwent (Midlands)	50	Below Normal	Exceptionally low	Exceptionally low	Below normal
Dove	52	Below Normal	Notably low	Exceptionally low	Normal
Lower Severn Estuary	58	Normal	Exceptionally low	Notably low	Normal
Lower Trent	31	Below Normal	Exceptionally low	Exceptionally low	Normal
Lower Wye	71	Normal	Exceptionally low	Notably low	Normal
Mid Severn	68	Normal	Notably low	Notably low	Normal
Shropshire Plains	57	Below Normal	Notably low	Notably low	Normal
Soar	32	Notably Low	Exceptionally low	Exceptionally low	Normal
Tame	40	Below Normal	Exceptionally low	Exceptionally low	Normal
Upper Trent	50	Below Normal	Notably low	Exceptionally low	Normal

Welsh Mountains	115	Above Normal	Normal	Notably low	Normal

8.3 River flows table

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

North Muskham	Trent	Trent to Cromwell	Exceptionally low	Notably low
Redbrook	Wye (Herefordshire)	Wye H and W d s Lugg	Normal	Exceptionally low
Stareton	Avon (Midlands)	Avon Warwks. Upper	Below 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 confl.	Notably low	Exceptionally low
Worksop	Ryton	Ryton Upper to Oldcoates Dyke	No data	No data
Yoxall	Trent	Trent to Tame Mease confl.	Notably low	Below normal

8.4 Groundwater table

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