Monthly water situation report: North-west England

1 Summary – January 2026

Rainfall for north-west England during January was classed as normal, having received 80% of the long-term average (LTA). Soil Moisture deficit (SMD) has continued to remain saturated across north-west England. In response to the rainfall, river flows have broadly declined and most were classed between normal and below normal, except the Glaze Brook catchment, which was classed as notably low. Total reservoir stocks had initially declined compared to December, but has recovered during January, total stocks was the same as the average for this time of the year.

1.1 Rainfall

January saw varied rainfall across north-west England, temporally, with 60% of the month's rainfall occurring between 10 and 21 January; and spatially, with indicator sites recording between 53% to 131% of their LTA.

At the end of January, rainfall for north-west England was classed as normal, at 80% of the LTA. Cumbria observed 80%, Lancashire 75%, and Greater Manchester, Merseyside and Cheshire (GMC) 98% of their LTAs, all classed as normal.

All hydrological areas in January were classed as normal, with the highest rainfall (in terms of the LTA) being the Cheshire Rivers Group hydrological area which received 116% of the LTA, and the lowest being the Ribble, and the Wyre and Lune hydrological areas which received 73% of their LTAs. Broadly, hydrological areas in Cumbria and Lancashire (CLA) received less rainfall than hydrological areas in GMC.

During the 3-month cumulative period ending in January, the coastal hydrological areas of Cumbria were overall wetter than the rest of north-west England, reflecting the predominant path taken by low-pressure systems took during the period. These coastal hydrological areas – namely the Esk (Dumfries), the Derwent, the Esk (Cumbria), and the Kent hydrological areas were all classed as exceptionally high. The Ribble hydrological area was the driest, and the only hydrological area classed as normal. All other hydrological areas were classed between above normal to notably high.

The 6-month cumulative rainfall period ending in January, sees a broadly similar trend, with hydrological areas in Cumbria, and Cheshire being wetter and classified as notably high to exceptionally high, whereas hydrological areas in Lancashire, Greater Manchester, and Merseyside, were all classed as above normal.

Notably, this was the second wettest 6-month cumulative period ending in January for the Esk (Cumbria) hydrological area, at 1447mm, 31mm less than the record in 1955.

The 12-month cumulative rainfall totals reflect how wet Cumbria was despite the dry weather in spring 2025. All hydrological areas in Cumbria and also the Wyre and Lune were classed between above normal and exceptionally high. All other hydrological areas in north-west England were classified as normal.

1.2 Soil moisture deficit and recharge

Rainfall recorded during the latter half of January resulted in SMD level remaining saturated across north-west England. At the start of February, SMD levels ranged from 0 to 1mm. This is lower than or near expected for the time of year for the whole of north-west England.

1.3 River flows

Please note that monthly mean flows recoded at the River Lune at Caton gauging station have not been included in this report due to missing data.

Mean river flows for January declined compared to flows in December in response to the reduction in rainfall. The spatial distribution of January's rainfall is also reflected in the river flows, with catchments across Lancashire, and Northern Manchester generally recording lower mean river flows than elsewhere.

River flows were highest (in terms of percentage of the LTA) in the Weaver catchment at Ashbrook (116% of the LTA, classed as normal), and lowest in the Hodder catchment at Hodder Place (53% of the LTA, classed as below normal).

For the other 22 indicator sites reported this month:

- 11 sites were classed as normal
- 10 sites were classed as below normal
- 1 site was classed as notably low

1.4 Groundwater levels

Groundwater levels across north-west England at the end of January were classed between below normal and exceptionally high. Groundwater levels decreased at:

- Victoria Road, from normal to below normal
- Furness Abbey, from exceptionally high to notably high

All other groundwater indicator sites remained at the same classification at:

- Brown Bank Lay-By, classed as normal
- Bruntwood Hall, classed as above normal
- Great Musgrave, classed as normal
- Lea Lane, classed as normal
- Primrose Hill, classed as normal
- Priors Heyes, classed as exceptionally high
- Skirwith, classed as normal
- Richmond Park, classed as exceptionally high

Please note that the levels at Priors Heyes remain high compared to the historic levels because the aquifer is recovering from the effects of historically high abstractions.

1.5 Reservoir stocks

Total reservoir stocks for north-west England had remained the same at 90% at the end of January, as it was at the end of December. This is the same as the average of this time of the year, and higher than this time last year when total reservoir stocks were 85%.

At the end of January, reservoir storage (in terms of percentage) was highest at Lake Vyrnwy at 100% full, and lowest (in terms of percentage) at the Ribble Supply District, which was 74% full.

The combined storage at Haweswater and Thirlmere was at 91%. This is higher than the average of 88% for this time of the year, and higher than this time last year when the storage was 74%.

Reservoirs kept low for maintenance works include parts of the:

- Longridge System (Ribble Reservoir Supply District) – Alston No.1, Alston No.2, Spade Mill No.1, and Spade Mill No.2
- Rivington System (Rivington Reservoir Supply District) – Anglezarke, High Bullough, and Yarrow
- Longdendale System (Longdendale Reservoir Supply District) – Audenshaw No.1, Torside, and Woodhead
- Barnacre Group (Ribble Reservoir Supply District) – Barnacre North, and Barnacre South
- Cowpe System (Pennines West Reservoir Supply District) – Cragg
- Cowm System (Longdendale Reservoir Supply District) – Cowm
- Poaka Beck System (Lakes Reservoir Supply District) – Harlock
- Piethorne Valley System (Pennines East Reservoir Supply District) – Kitcliffe

- Ogden (Barley) System (Ribble Reservoir Supply District) – Ogden (Barley) Lower, and Ogden (Barley) Upper
- Ridgegate System (Stockport Reservoir Supply District) – Ridgegate
- Stocks System (Ribble Reservoir Supply District) – Stocks

1.6 Water abstraction restrictions and environmental impacts

Six water abstraction restrictions were issued in CLA during the first part of January, all of which were subsequently rescinded in mid-January when rainfall led to recovery in river levels. No water abstraction restrictions were issued in GMC.

There were no reported environmental incidents related to dry weather across north-west England.

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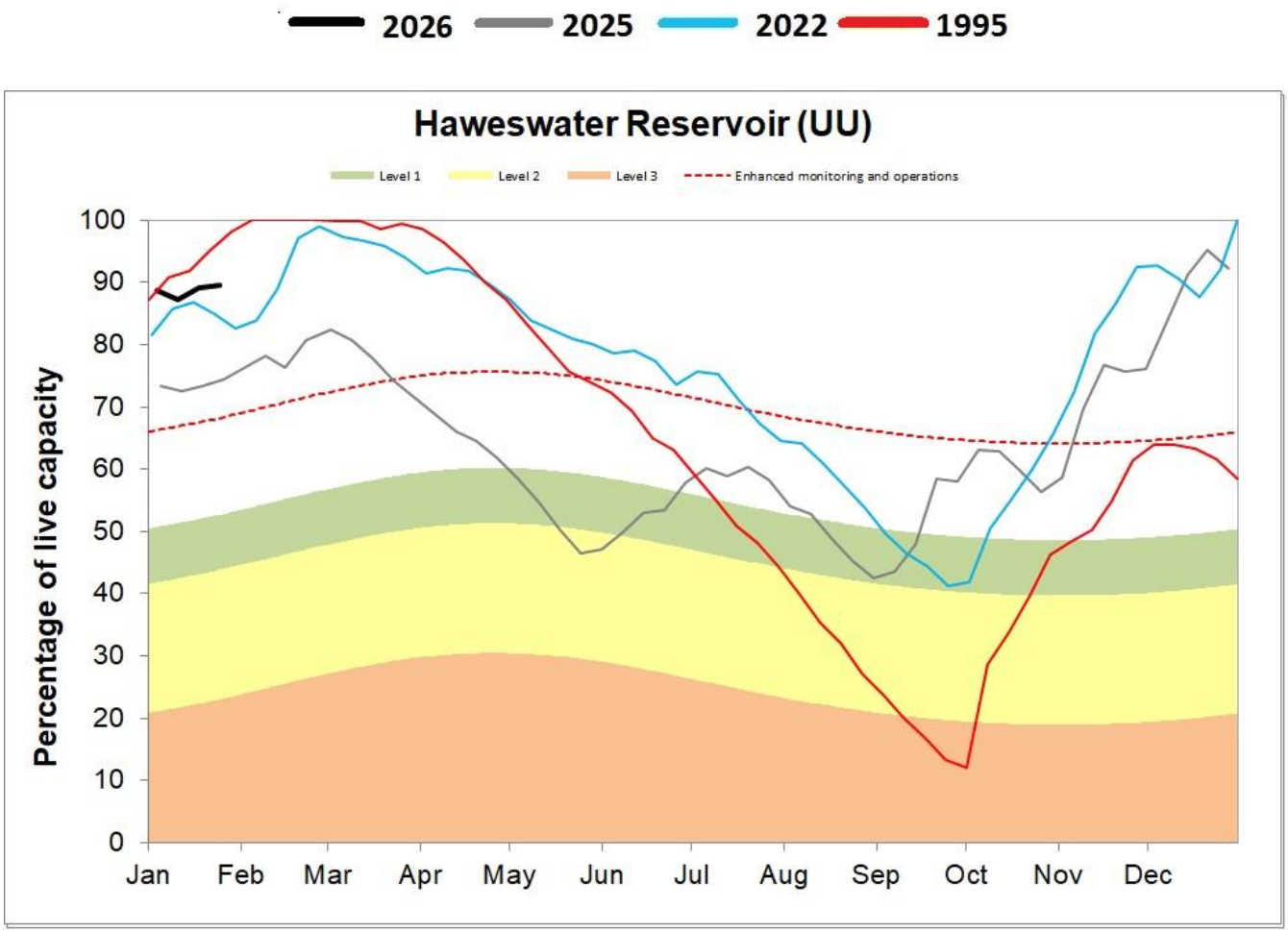
Author: Cumbria and Lancashire Hydrology Team, hydrology.CMBLNC@environment-agency.gov.uk

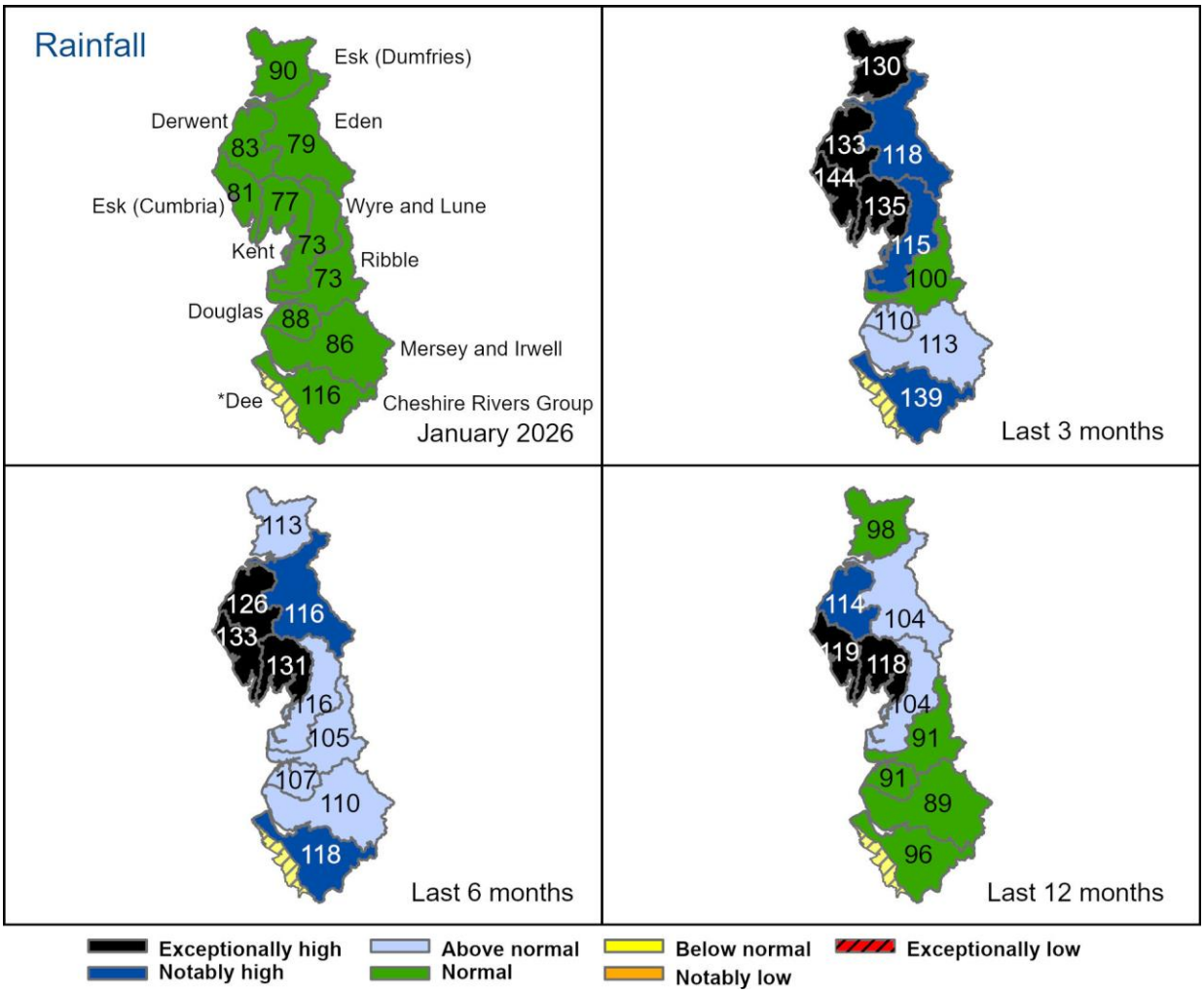
Figure 1.5: Storage in Haweswater Reservoir, including the drought levels for the reservoir and storage for the current year (2026) and representative years: 1995, 2022 and 2025 (*Source: United Utilities* (UU)).



2 Rainfall

2.1 Rainfall map

Figure 2.1: Total rainfall (as a percentage of the 1991 to 2020 long term average) for hydrological areas for the current month (up to 31 January 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.



Rainfall data since January 2025, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

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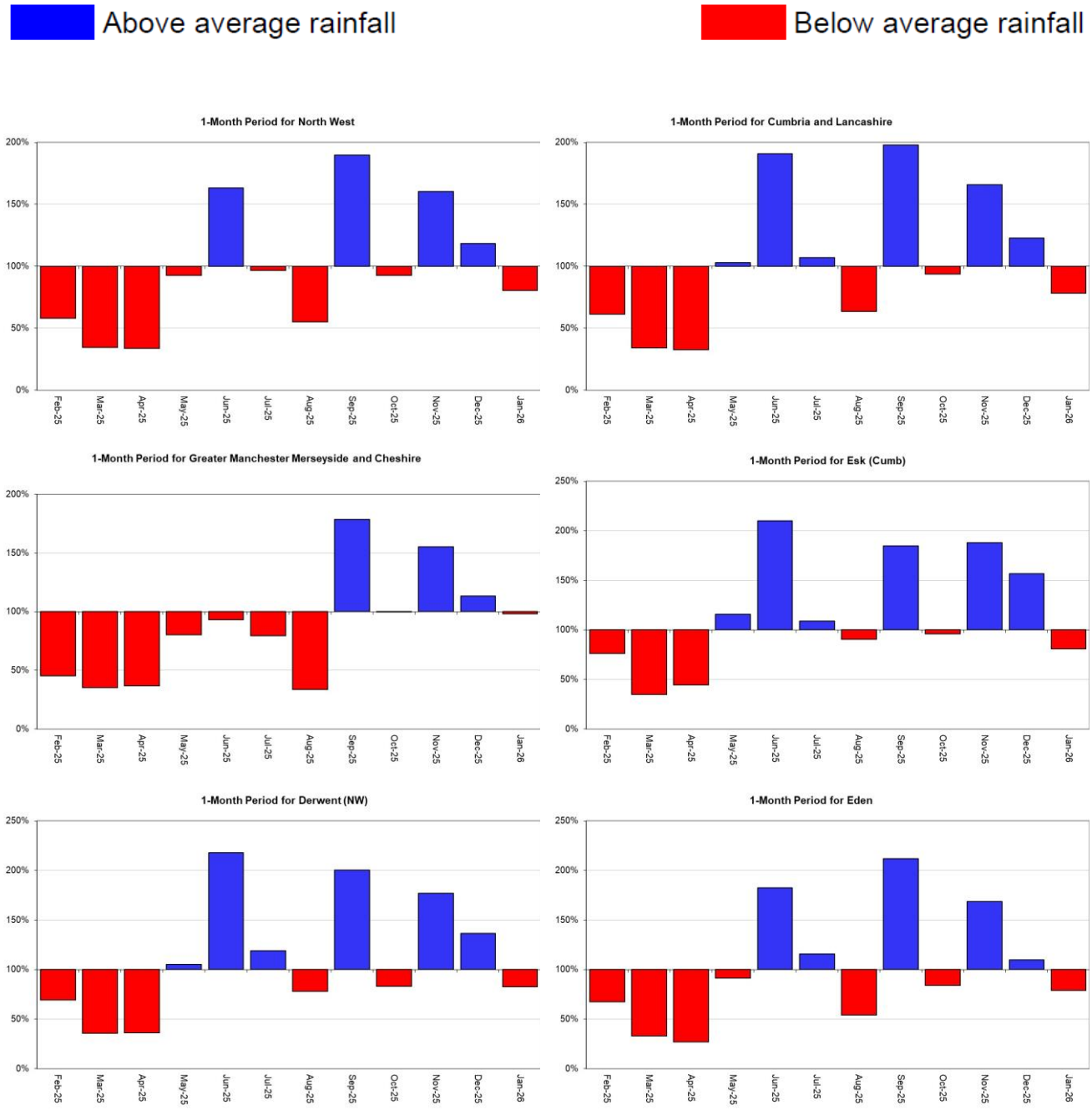
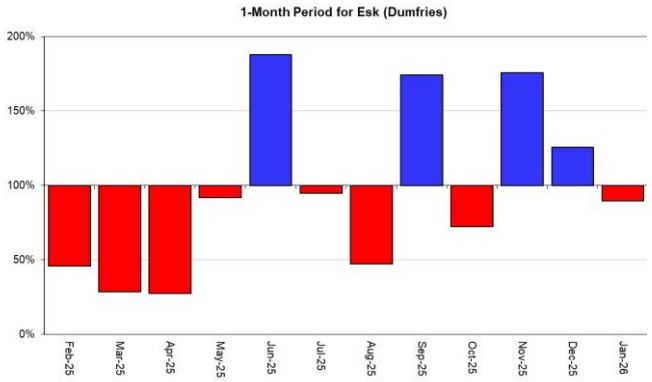
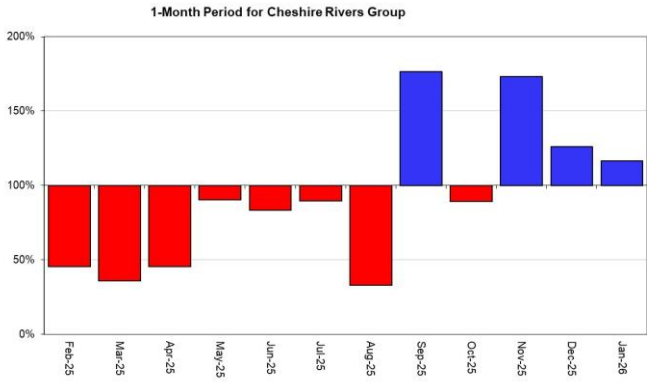
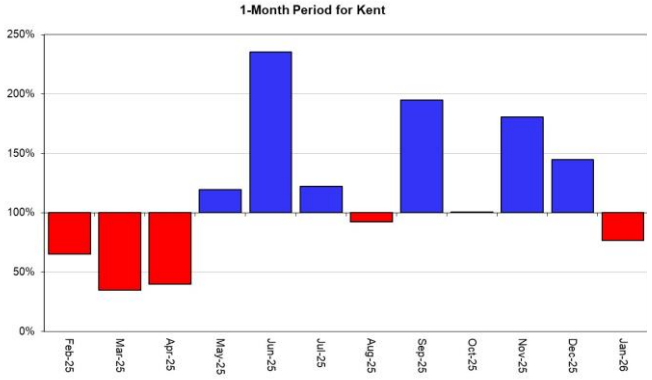
2.2 Rainfall charts

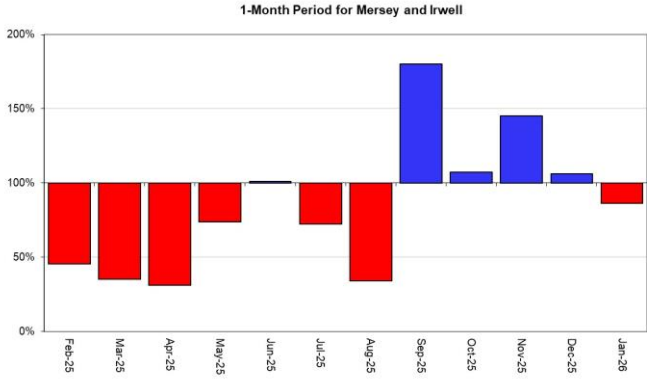
Figure 2.2: Monthly rainfall totals for the past 12 months expressed as a percentage of the 1991 to 2020 long term average for North-west England and its hydrological areas.

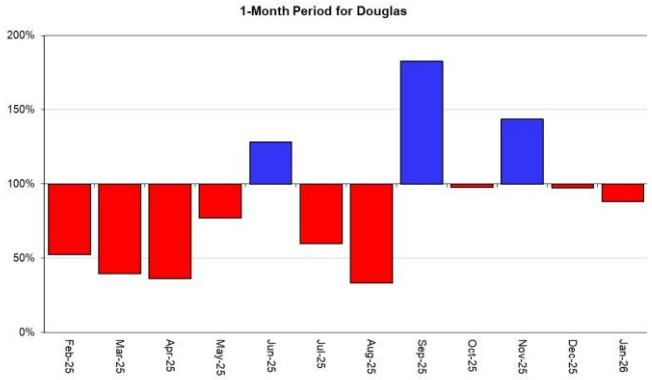


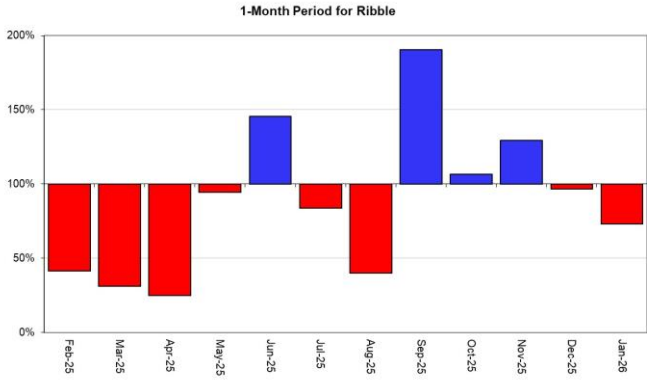

1-Month Period for Esk (Dumfries)
200%
150%
100%
50%
0%
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26

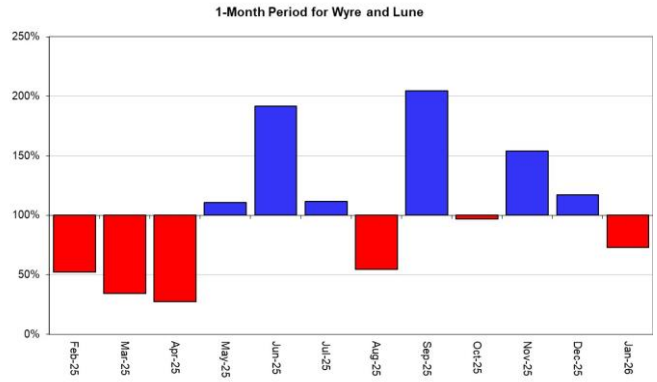

1-Month Period for Cheshire Rivers Group
200%
150%
100%
50%
0%
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26


1-Month Period for Kent
250%
200%
150%
100%
50%
0%
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26


1-Month Period for Mersey and Irwell
200%
150%
100%
50%
0%
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26


1-Month Period for Douglas
200%
150%
100%
50%
0%
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26


1-Month Period for Ribble
200%
150%
100%
50%
0%
Feb-25
Mar-25
Apr-25
May-25
Jun-25
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26

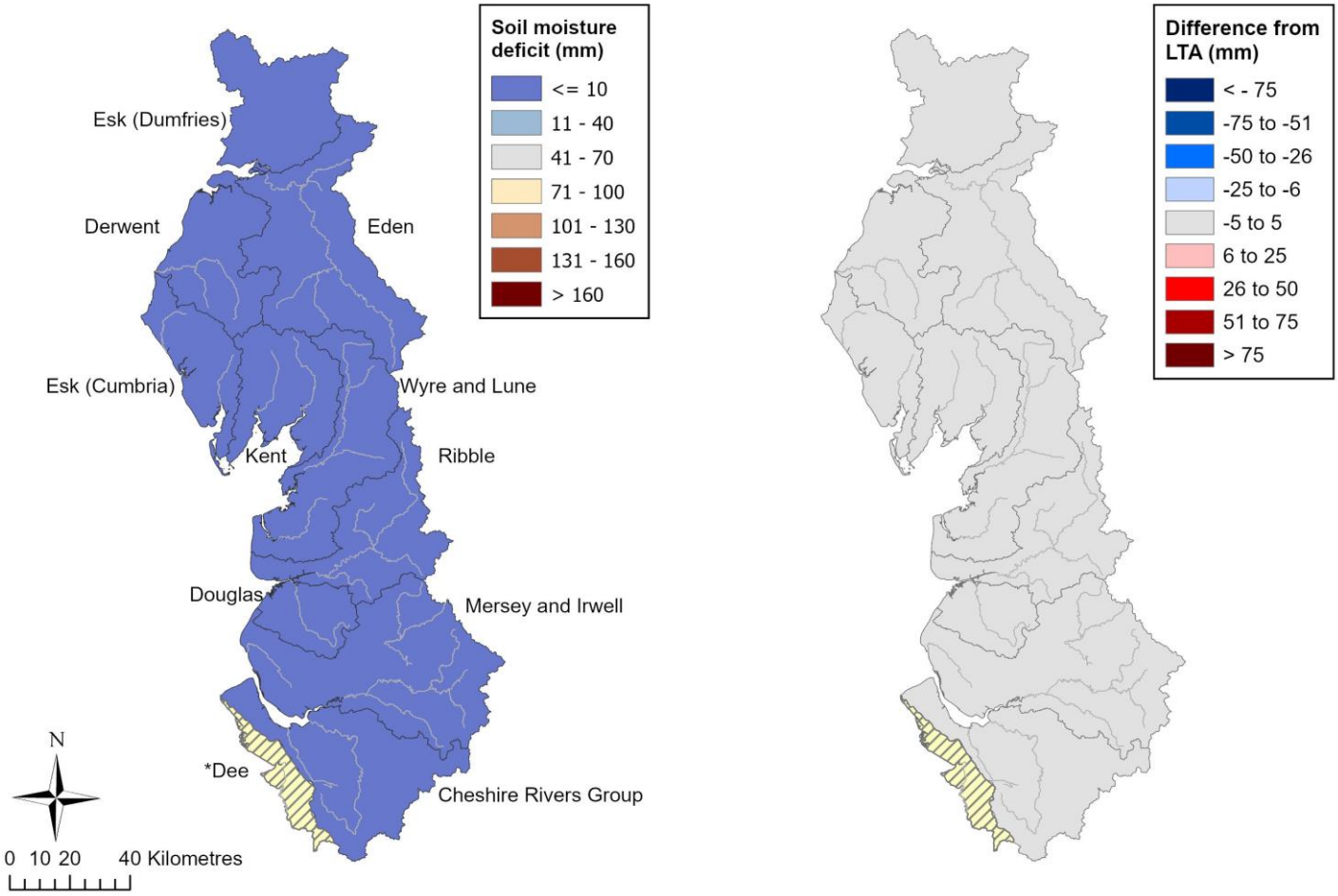


Rainfall data since January 2025, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded rainfall dataset derived from registered rain gauges (Source: Met Office. Crown copyright, 2026).

3 Soil moisture deficit

3.1 Soil moisture deficit map

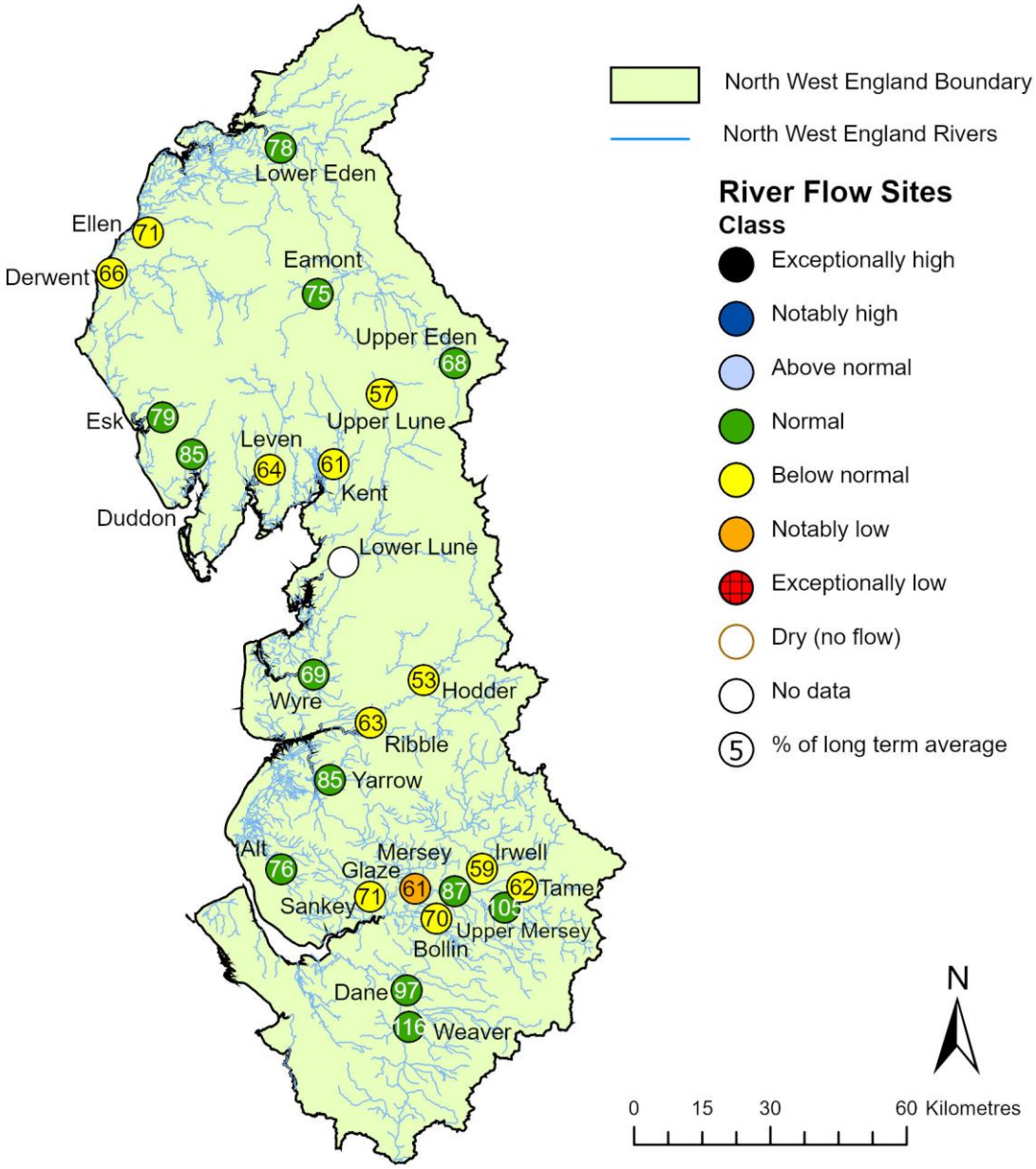
Figure 3.1: Soil moisture deficits for the week ending 3 February 2026. The map on the left shows actual soil moisture deficits (mm) and on the right shows the difference (mm) of the actual from the 1991 - 2020 long term average soil moisture deficits. MORECS data for real land use.



4 River flows

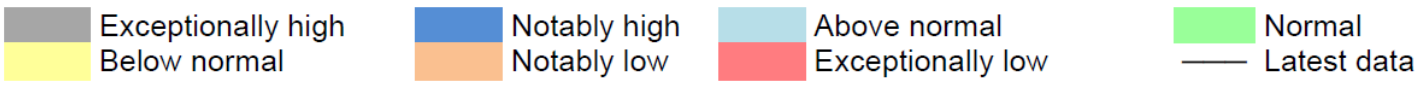
4.1 River flows map

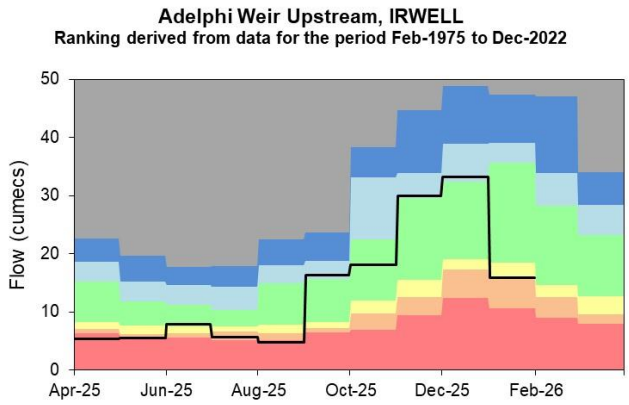
Figure 4.1: Monthly mean river flow for indicator sites for January 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic January monthly means. Table available in the appendices with detailed information.

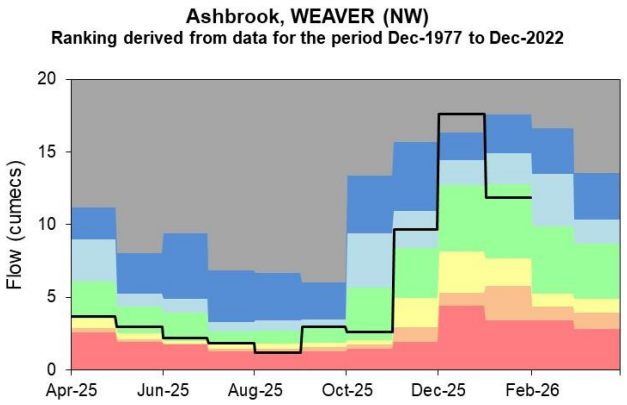


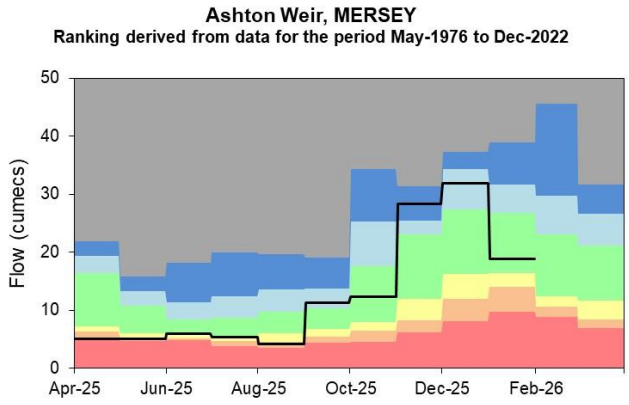
4.2 River flow charts

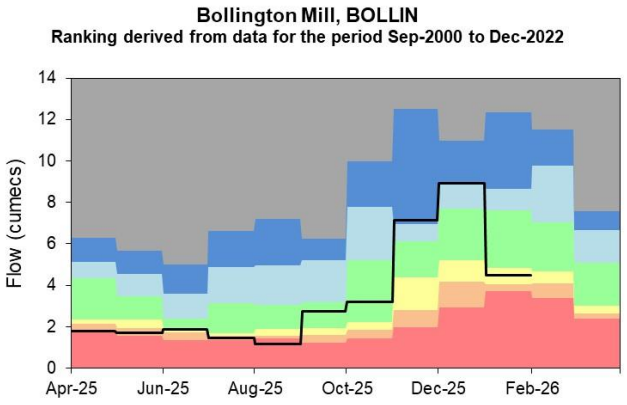
Figure 4.2: Monthly mean river flow for index sites over the past year, compared to an analysis of historic monthly mean flows.



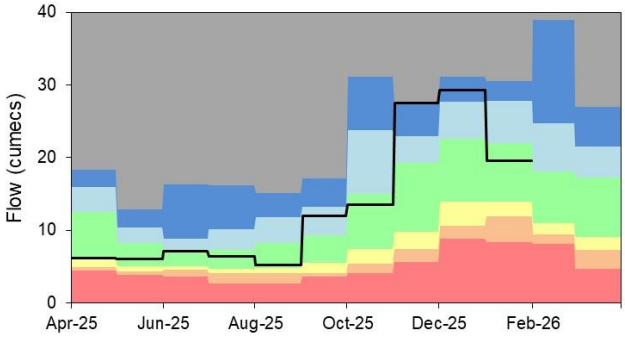




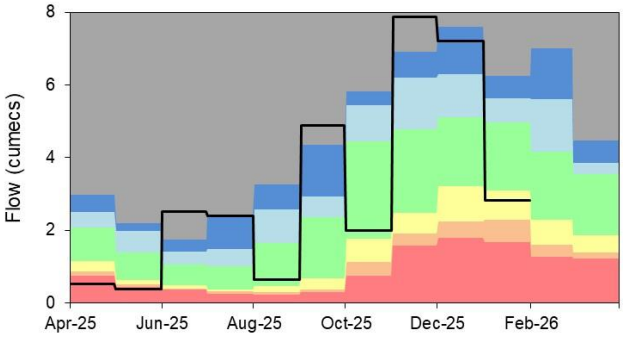




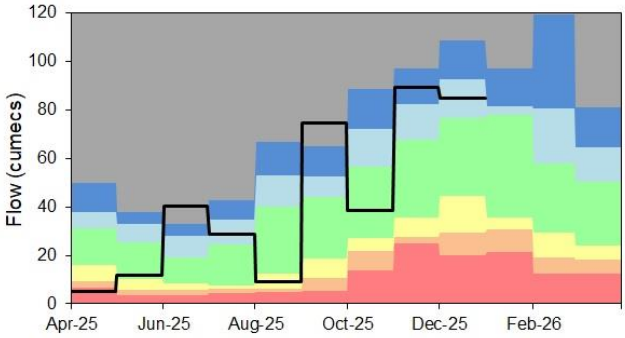
Brinksway, MERSEY
Ranking derived from data for the period Jan-1974 to Dec-2022



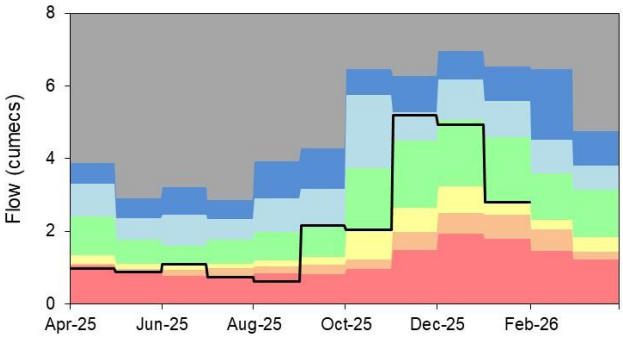
Bullgill, ELLEN
Ranking derived from data for the period Jan-1976 to Dec-2022



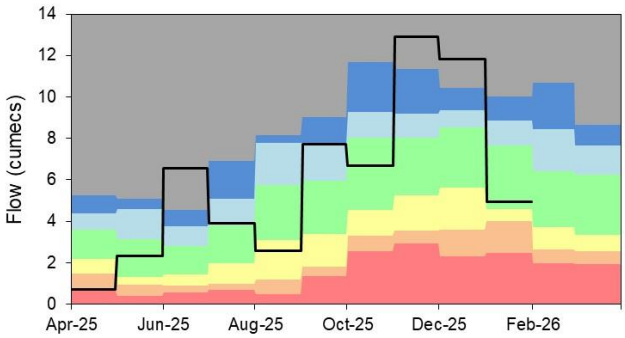
Caton, LUNE
Ranking derived from data for the period Jan-1959 to Dec-2022



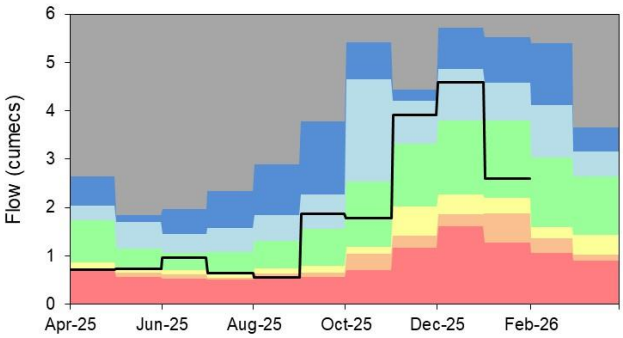
Causey Bridges, SANKEY
Ranking derived from data for the period Jan-1977 to Dec-2022



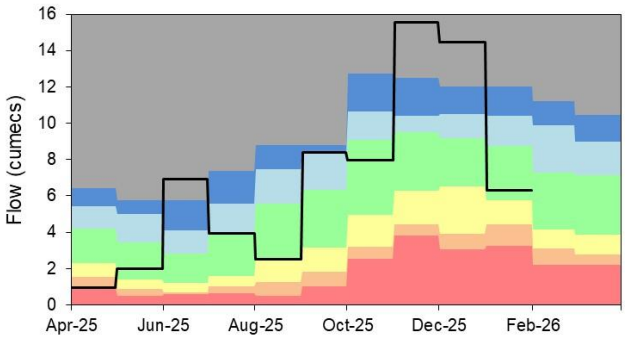
Cropple How, ESK (NW)
Ranking derived from data for the period Jan-1976 to Dec-2022



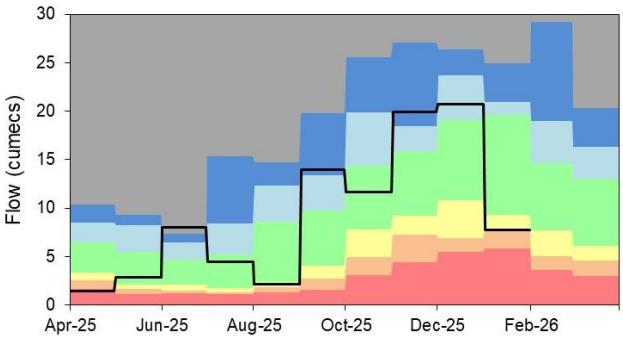
Croston, YARROW
Ranking derived from data for the period Jan-1976 to Dec-2022



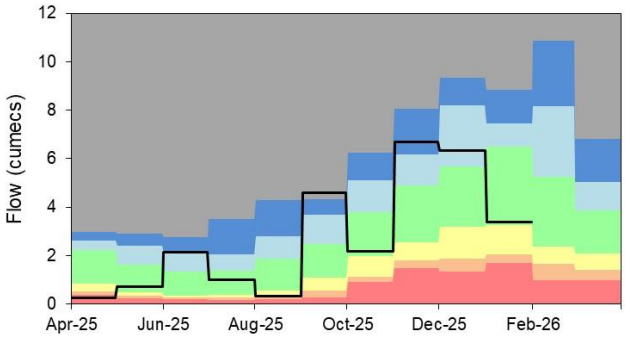
Duddon Hall, DUDDON
Ranking derived from data for the period Mar-1968 to Dec-2022



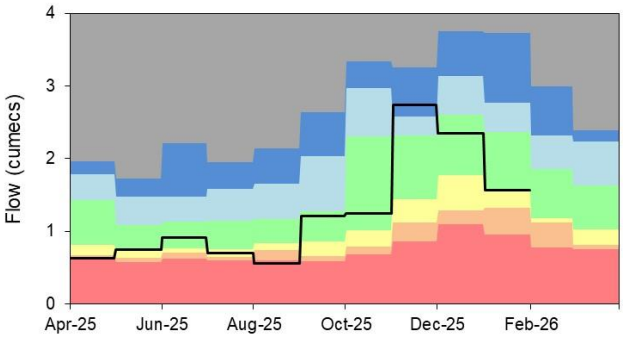
Hodder Place, HODDER
Ranking derived from data for the period Jan-1976 to Dec-2022



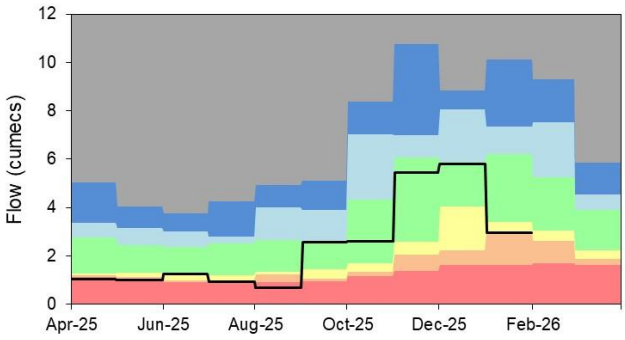
Kirkby Stephen, EDEN (NW)
Ranking derived from data for the period Oct-1971 to Dec-2022



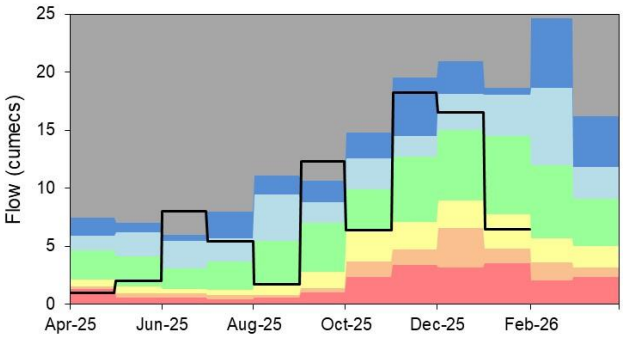
Kirkby, ALT
Ranking derived from data for the period Oct-1977 to Dec-2022



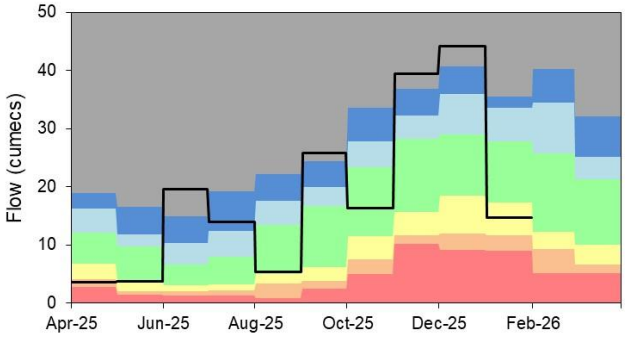
Little Woolden Hall Ultrasonic, GLAZE
Ranking derived from data for the period Jul-1995 to Dec-2022



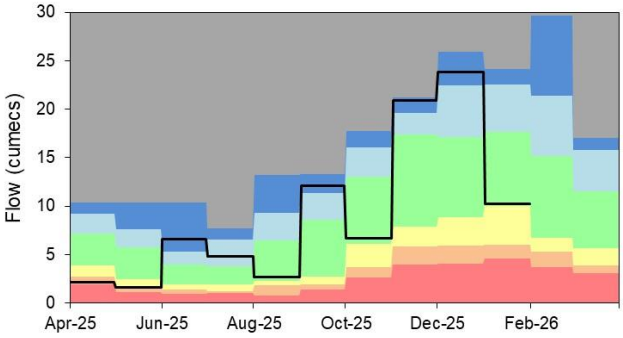
Lunes Bridge, LUNE
Ranking derived from data for the period Dec-1979 to Dec-2022



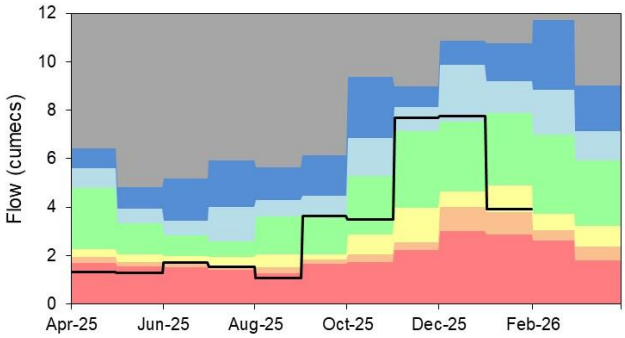
Newby Bridge FMS, LEVEN (NW)
Ranking derived from data for the period Jan-1972 to Dec-2022



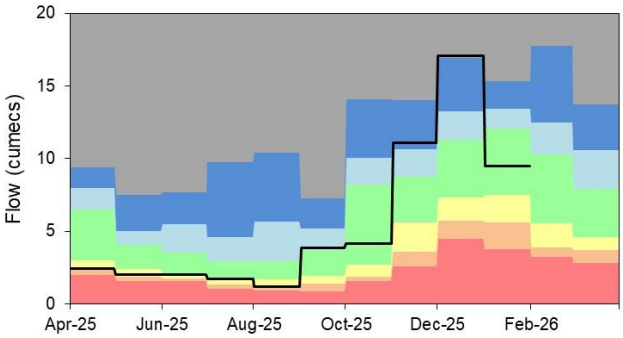
Pooley Bridge, EAMONT
Ranking derived from data for the period Jul-1970 to Dec-2022



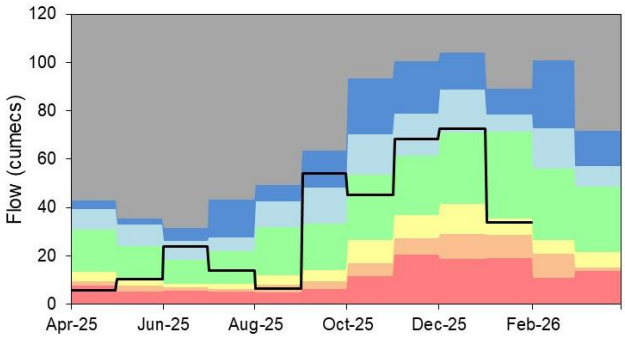
Portwood, TAME
Ranking derived from data for the period Jan-1976 to Dec-2022



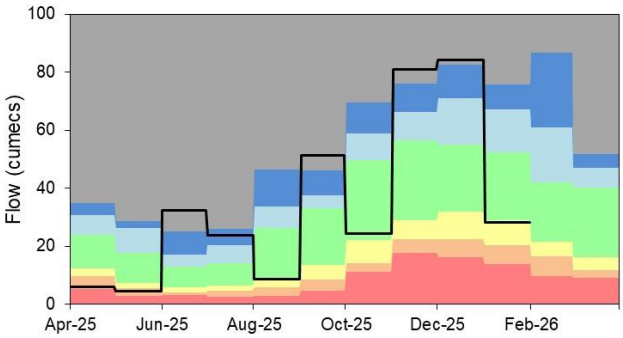
Rudheath, DANE
Ranking derived from data for the period Jan-1976 to Dec-2022



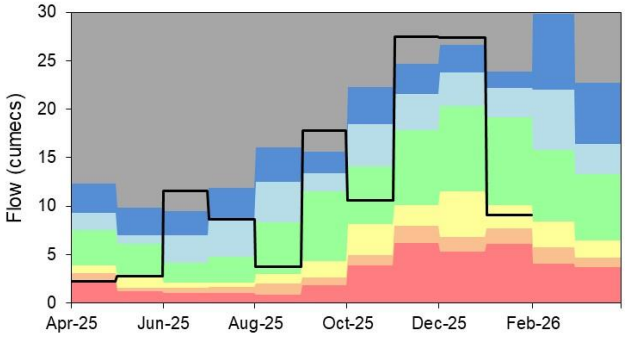
Samlesbury Pgs, RIBBLE (NW)
Ranking derived from data for the period May-1960 to Dec-2022



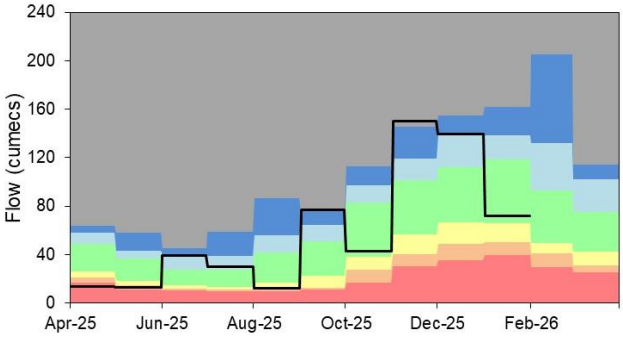
Seaton Mill, DERWENT (NW)
Ranking derived from data for the period Sep-1960 to Dec-2022



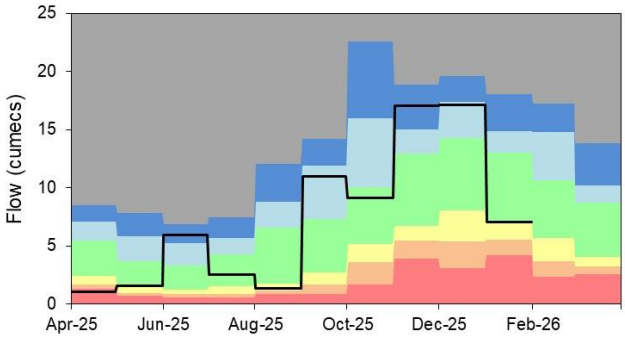
Sedgwick, KENT
Ranking derived from data for the period Nov-1968 to Dec-2022



Sheepmount, EDEN (NW)
Ranking derived from data for the period Oct-1967 to Dec-2022



St Michaels FMS, WYRE
Ranking derived from data for the period Oct-1963 to Dec-2022

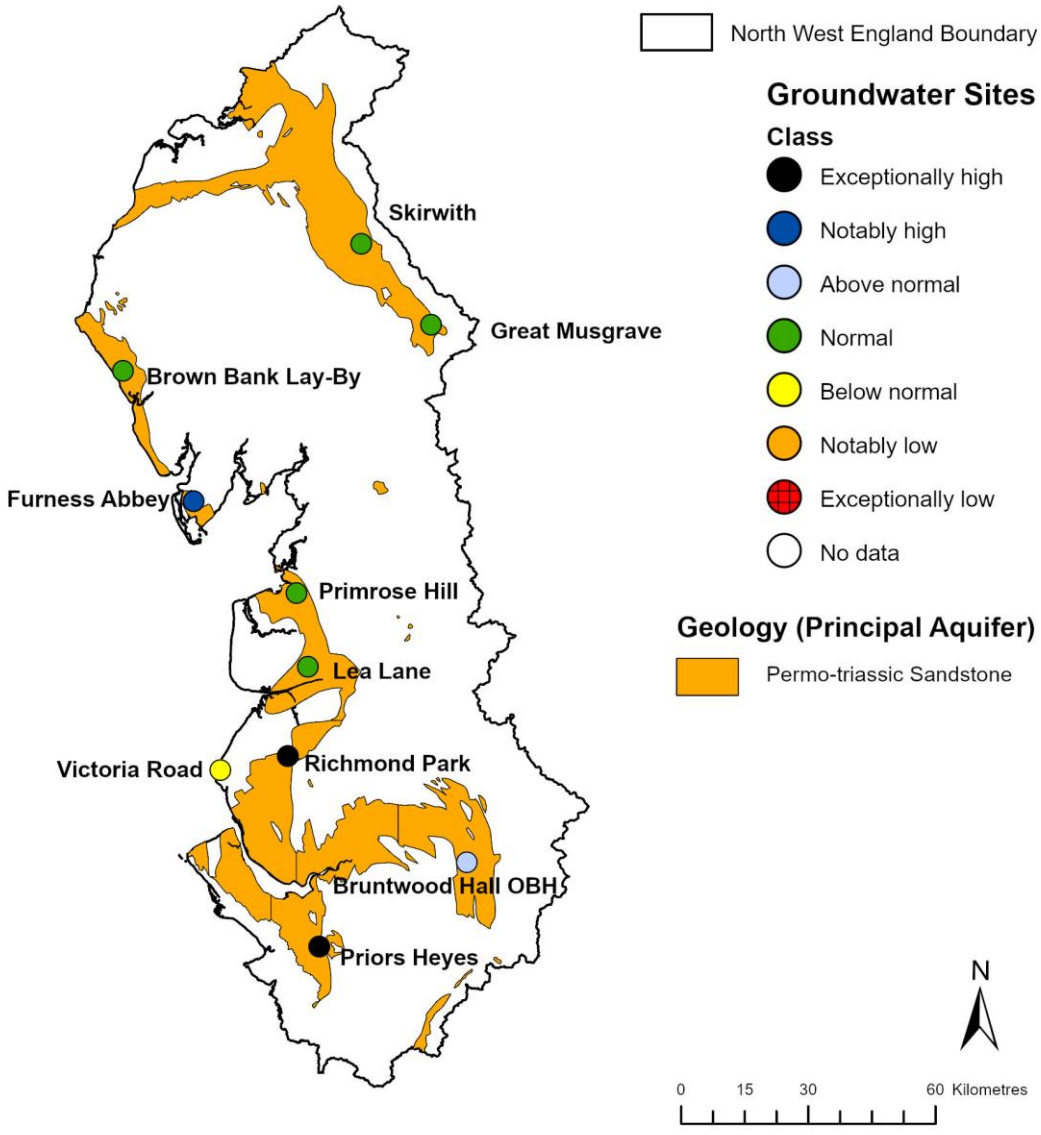


Source: Environment Agency.

5 Groundwater levels

5.1 Groundwater levels map

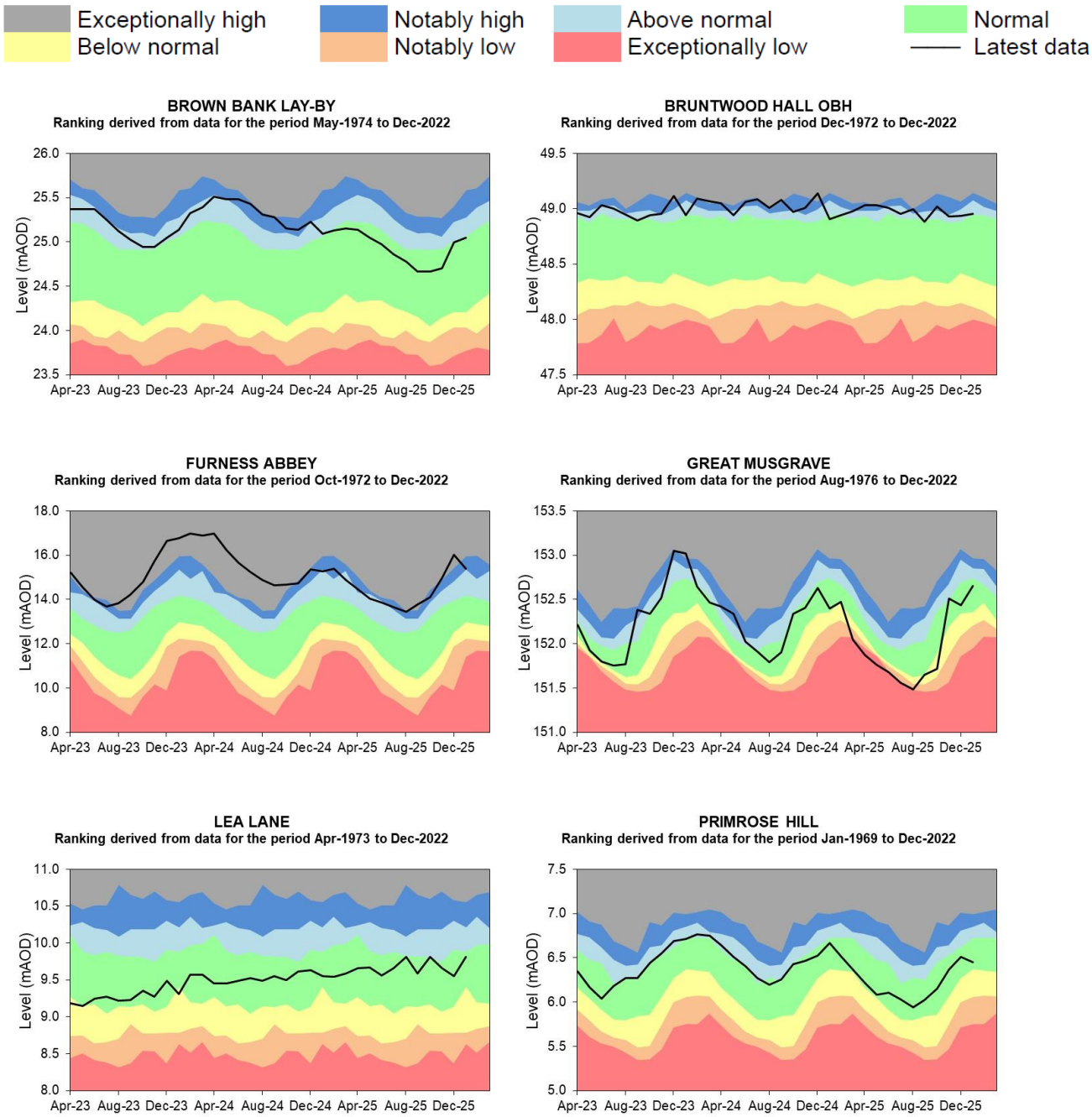
Figure 5.1: Groundwater levels for indicator sites at the end of January 2026, classed relative to an analysis of respective historic January levels. Table available in the appendices with detailed information. Please note Victoria Road Borehole sits within a superficial deposit as opposed to a bedrock aquifer. This is why the geology type is not marked on the map.

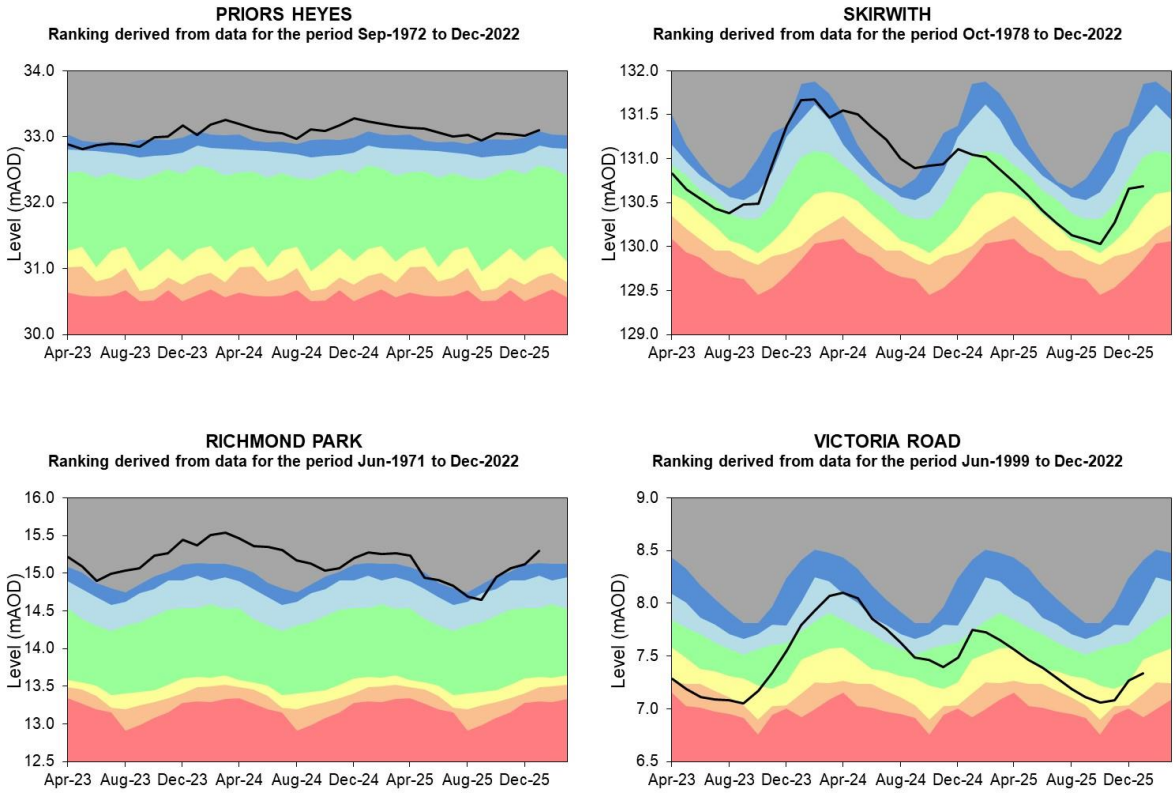


(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2026.

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 and long term maximum and minimum levels.





Source: Environment Agency, 2026.

6 Reservoir stocks

Figure 6.1: The location of reservoirs that comprise the supply districts across North-west England and selected individual reservoirs.

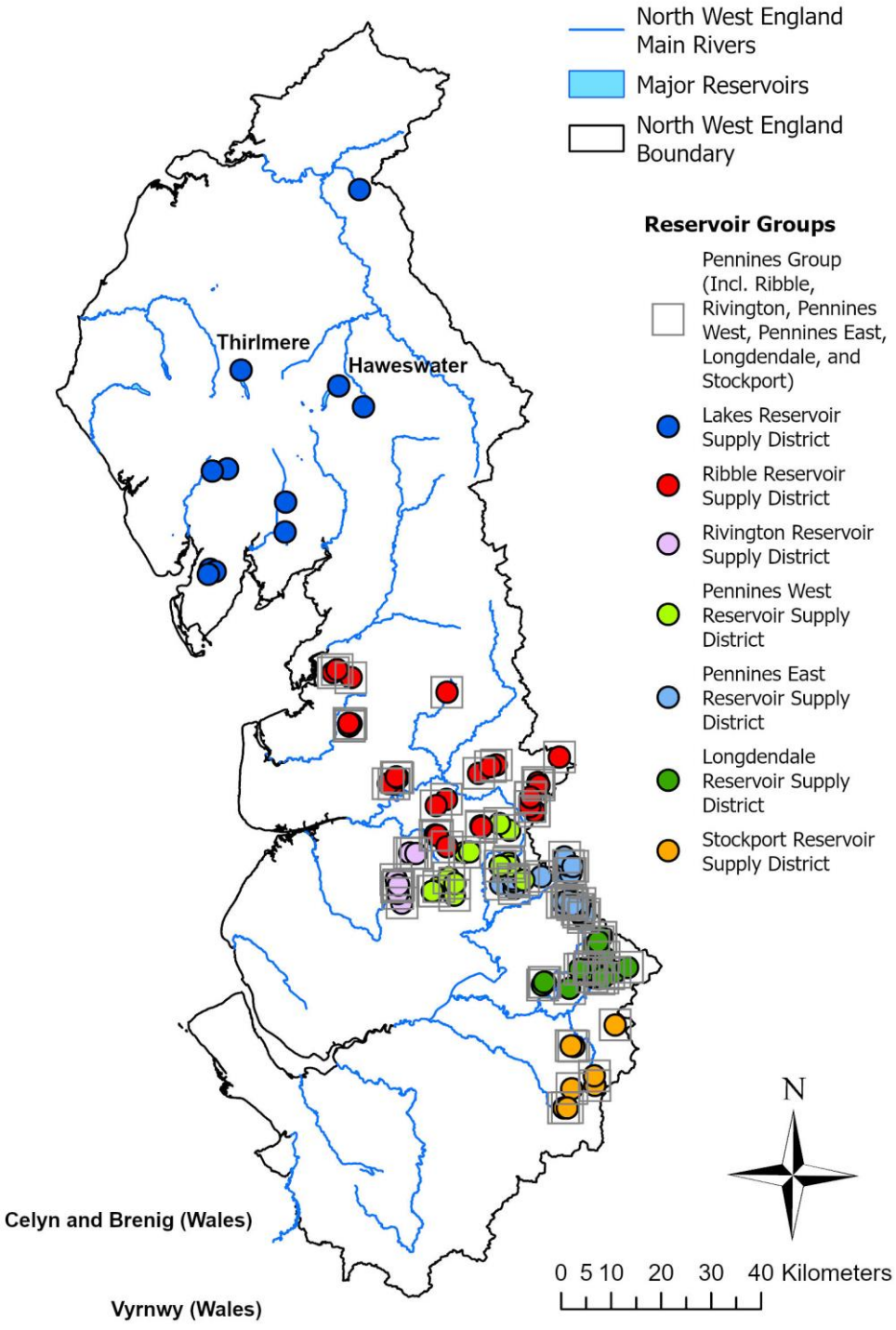
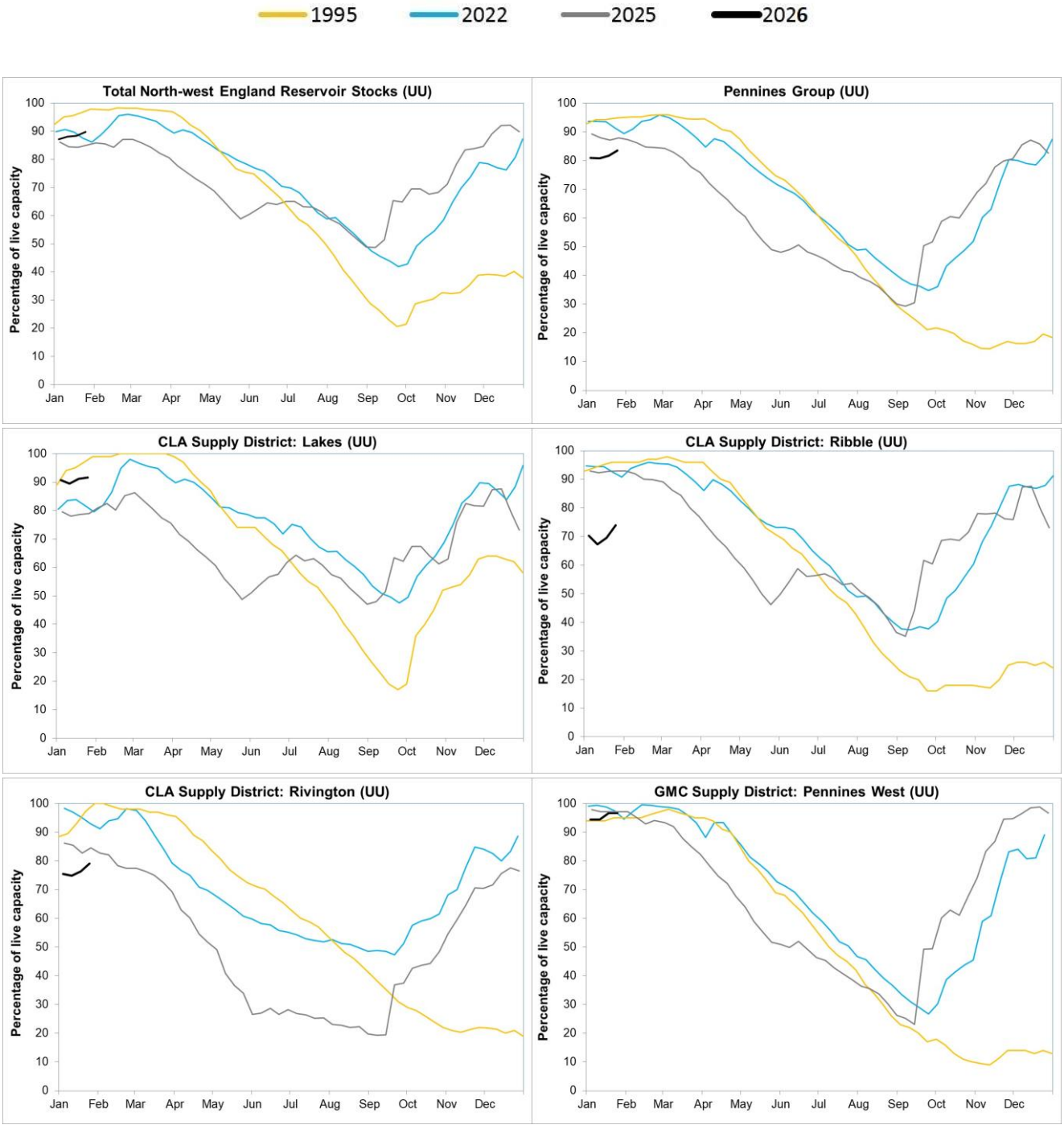
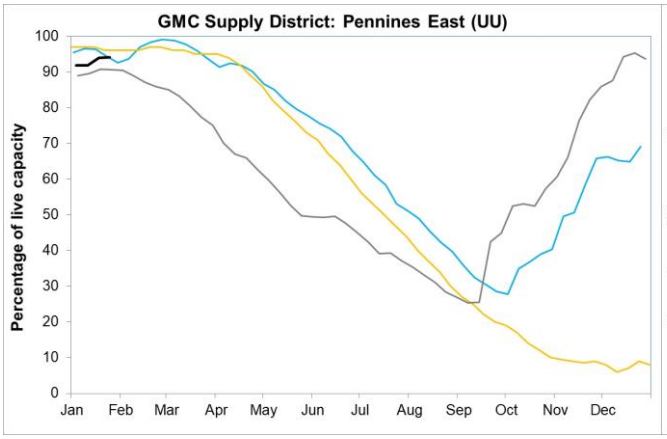
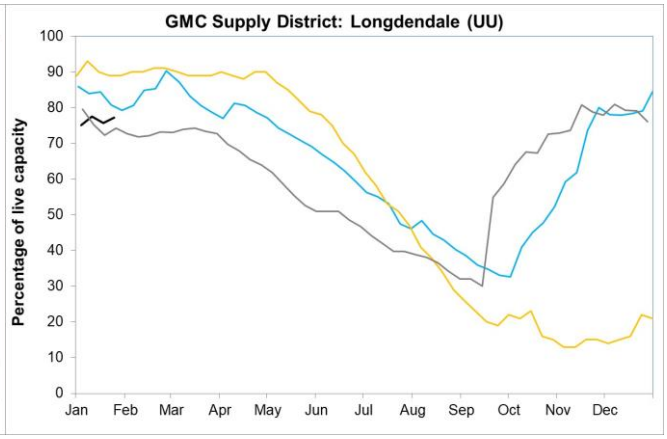
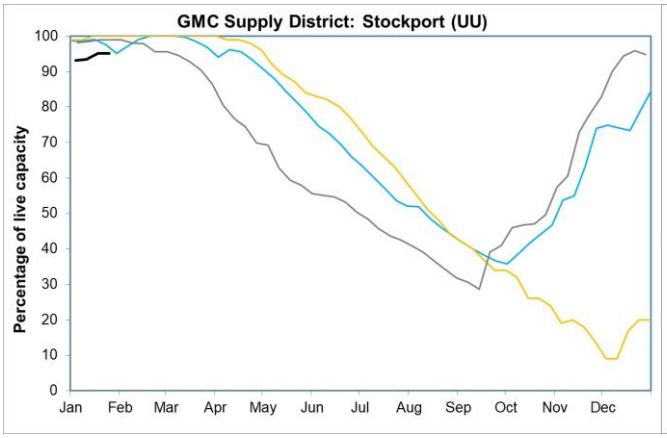


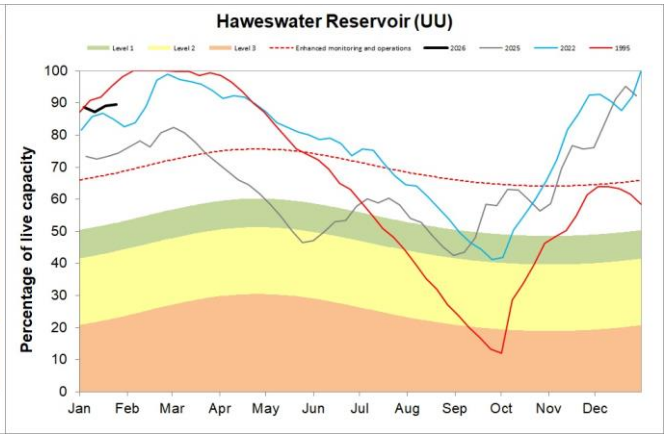
Figure 6.2: End of month reservoir stocks for supply districts across North-west England and selected individual reservoirs for current year (2026) and representative years: 1995, 2022 and 2025. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.

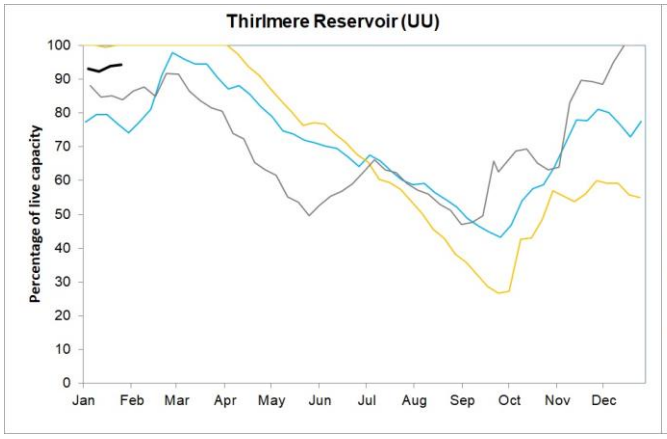


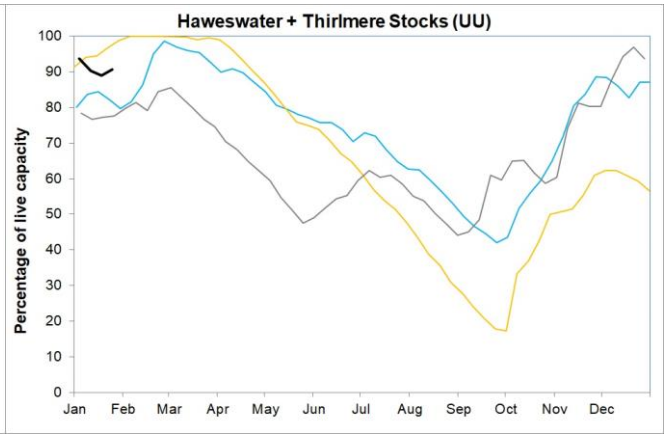

GMC Supply District: Pennines East (UU)
Percentage of live capacity
100
90
80
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

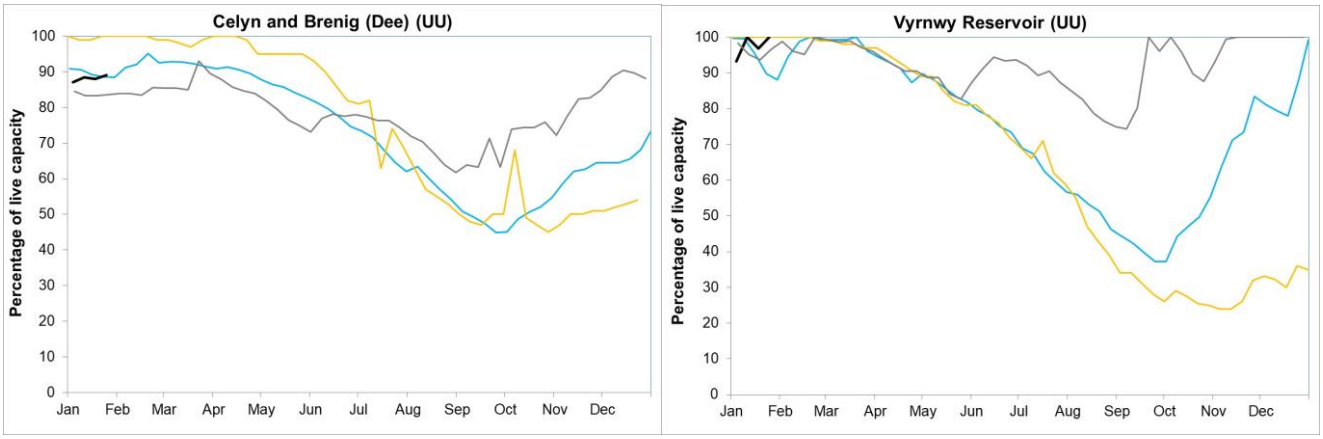

GMC Supply District: Longdendale (UU)
Percentage of live capacity
100
90
80
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


GMC Supply District: Stockport (UU)
Percentage of live capacity
100
90
80
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


Haweswater Reservoir (UU)
Level 1
Level 2
Level 3
Enhanced monitoring and operations
2026
2025
2022
1995
Percentage of live capacity
100
90
80
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


Thirlmere Reservoir (UU)
Percentage of live capacity
100
90
80
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


Haweswater + Thirlmere Stocks (UU)
Percentage of live capacity
100
90
80
70
60
50
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Source: (UU) United Utilities, (EA) The Environment Agency.

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).

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.

8 Appendices

8.1 Rainfall table

Hydrological area	Jan 2026 rainfall % of long term average 1991 to 2020	Jan 2026 band	Nov 2025 to January cumulative band	Aug 2025 to January cumulative band	Feb 2025 to January cumulative band
Cheshire Rivers Group	116	Normal	Notably high	Notably high	Normal
Derwent (North West)	83	Normal	Exceptionally high	Exceptionally high	Notably high
Douglas	88	Normal	Above normal	Above normal	Normal
Eden	79	Normal	Notably high	Notably high	Above normal
Esk (Cumbria)	81	Normal	Exceptionally high	Exceptionally high	Exceptionally high
Esk (Dumfries)	90	Normal	Exceptionally high	Above normal	Normal
Kent	77	Normal	Exceptionally high	Exceptionally high	Exceptionally high
Mersey And Irwell	86	Normal	Above normal	Above normal	Normal
Ribble	73	Normal	Normal	Above normal	Normal
Wyre And Lune	73	Normal	Notably high	Above normal	Above normal
North West	80	Normal	Notably high	Above normal	Above normal

8.2 River flows table

Site name	River	Catchment	Jan 2026 band	Dec 2025 band
Adelphi Weir Upstream	Irwell	Irwell (Croal to Irk)	Below normal	Above normal
Ashbrook	Weaver (North West)	Weaver Upper	Normal	Exceptionally high
Ashton Weir	Mersey	Mersey Non Tidal	Normal	Above normal
Bollington Mill	Bollin	Bollin	Below normal	Notably high
Brinksway	Mersey	Mersey Non Tidal	Normal	Notably high
Bullgill	Ellen	Ellen Lower	Below normal	Notably high
Caton	Lune	Lune Lower Tidal		Above normal
Causey Bridges	Sankey	Mersey Non Tidal	Below normal	Normal
Cropple How	Esk (North West)	Esk (South West Lakes)	Normal	Exceptionally high
Croston	Yarrow	Yarrow Lower	Normal	Above normal
Duddon Hall	Duddon	Duddon	Normal	Exceptionally high
Hodder Place	Hodder	Hodder Lower	Below normal	Above normal
Kirkby	Alt	Alt	Normal	Normal

Kirkby Stephen	Eden (North West)	Eden Cumbria Upper	Normal	Above normal
Little Woolden Hall Ultrasonic	Glaze	Glaze	Notably low	Normal
Lunes Bridge	Lune	Lune Upper	Below normal	Above normal
Newby Bridge Flood Monitoring Station	Leven (North West)	Leven Cumbria	Below normal	Exceptionally high
Pooley Bridge	Eamont	Eamont	Normal	Notably high
Portwood	Tame	Tame	Below normal	Above normal
Rudheath	Dane	Dane	Normal	Exceptionally high
Samlesbury Permanent Gauging Station	Ribble (North West)	Ribble Lower	Below normal	Above normal
Seaton Mill	Derwent (North West)	Derwent Cumbria Lower	Below normal	Exceptionally high
Sedgwick	Kent	Levens Bridge	Below normal	Exceptionally high
Sheepmount	Eden (North West)	Eden Cumbria Lower	Normal	Above normal
St Michaels Flood Monitoring Station	Wyre	Brock	Normal	Above normal

8.3 Groundwater table

Site name	Aquifer	End of Jan 2026 band	End of Dec 2025 band
Brown Bank Lay-by	West Cumbria Permo-triassic Sandstone	Normal	Normal
Bruntwood Hall Obh	East Cheshire Permo-triassic Sandstone	Above normal	Above normal
Furness Abbey	Furness Permo-triassic Sandstone	Notably high	Exceptionally high
Great Musgrave	Eden Valley And Carlisle Basin Permo-triassic Sandstone	Normal	Normal
Lea Lane	Fylde Permo-triassic Sandstone	Normal	Normal
Priors Heyes	West Cheshire Permo-triassic Sandstone	Exceptionally high	Exceptionally high
Primrose Hill	Fylde Permo-triassic Sandstone	Normal	Normal
Richmond Park	Rufford Permo-triassic Sandstone	Exceptionally high	Exceptionally high
Skirwith	Eden Valley And Carlisle Basin Permo-triassic Sandstone	Normal	Normal
Victoria Road Entrance	West Lancashire Quarternary Sand And Gravel Superficial Deposits	Below normal	Normal