Monthly water situation report: North East Area

1 Summary - January 2026

January was a wet month with all catchments recording above average rainfall. Three named storms hit the UK during January, some of which brought strong winds and heavy rainfall to the area. Monthly rainfall totals were classed as notably high, above normal and normal for all catchments. Monthly mean river flows were elevated and fell within the notably high, above normal and normal ranges. Soils across the area remained fully saturated. Reservoir stocks were healthy for January, with the exception of Derwent reservoir which was below average for the time of year.

1.1 Rainfall

Monthly rainfall totals were above the long term average (LTA) for all catchments. Totals ranged from 107% of the LTA in the Tyne catchment to 167% of the LTA in the Northumbria North Sea Tribs catchment. Storm Goretti from 8 to 9 January had little impact in terms of rainfall in the North East area, but an analysis of the daily rainfall totals shows prolonged rainfall was recorded on 11 January. On 22 January heavy rainfall was again recorded across the area; this was followed by Storm Ingrid on 24 January and then Storm Chandra on 26 January, both of which brought further heavy rain and strong winds. Cumulative 3 month totals are now classed as notably high across all catchments.

1.2 Soil moisture deficit and recharge

Soil moisture deficits are even lower than last month and all catchments are fully saturated with soil moisture deficits of zero across the North East area.

1.3 River flows

Monthly mean river flows fell within the normal, above normal or notably high ranges for January. Monthly mean flows ranged from 78% of the LTA at Haydon Bridge in the South Tyne catchment to 163% of the LTA at Mitford in the Wansbeck catchment. Analysis of daily mean flows shows that flows were exceptionally low in the first week of January at Haydon Bridge on the River South Tyne and Heaton Mill on the River Till. Daily mean flows increased at all indicator sites on 11 January following a period of rainfall. On 22 January prolonged rainfall was recorded across the area with an increase in flows at all indicator sites. Exceptionally high flows were recorded at all sites with the exception of Haydon Bridge. Daily mean flows remained elevated at the end of the month and fell within the exceptionally high and notably high ranges, with the exception of Haydon Bridge which fell within the normal range.

1.4 Groundwater levels

Groundwater levels varied across the area this month. Levels increased at Aycliffe in the Skerne Magnesian Limestone aquifer and decreased at Red Lion and West Hall Farm. Royalty Observation and Townlaw in the Till Fell Sandstone fell within the normal range for the time of year.

1.5 Reservoir stocks

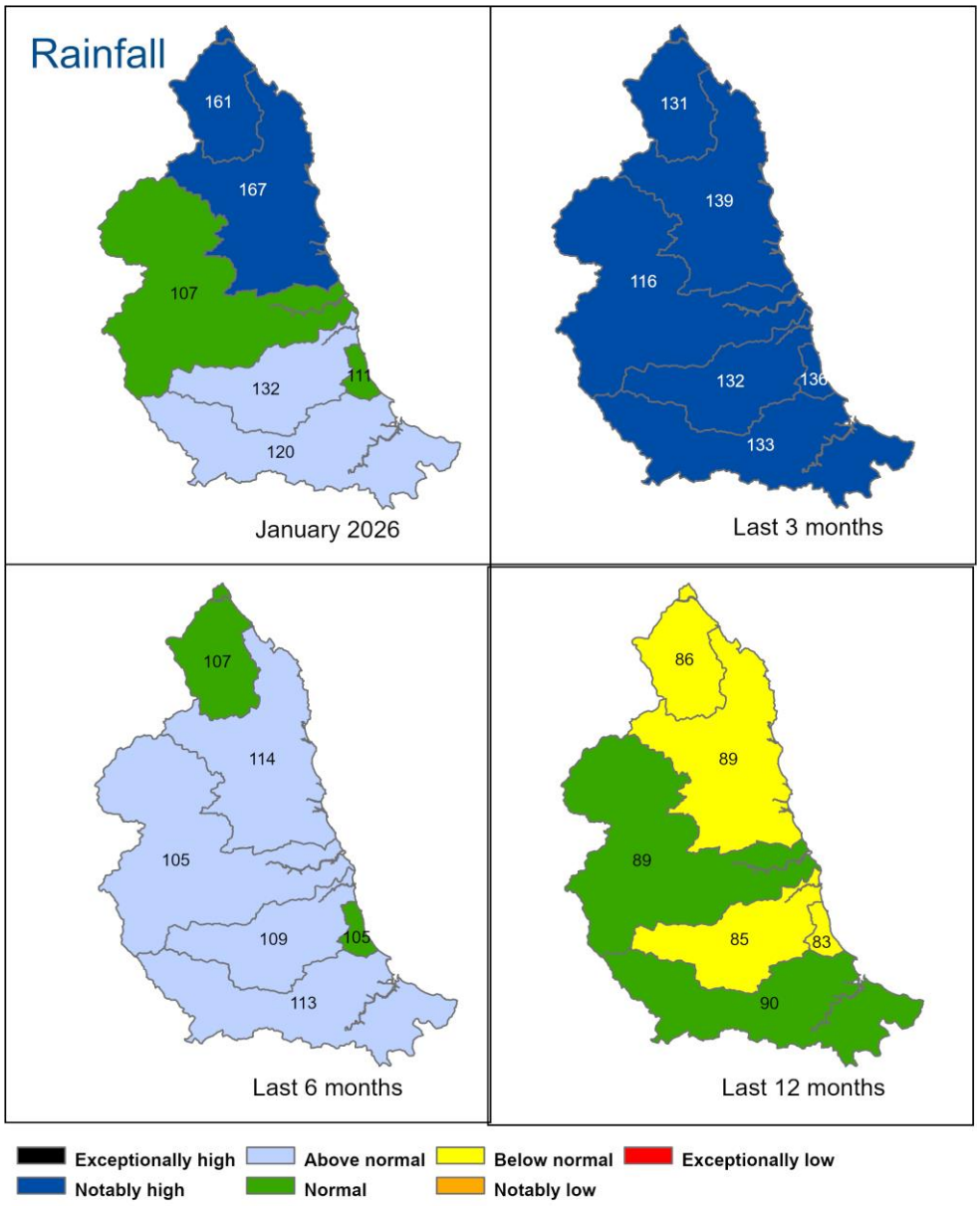
All reservoir stocks across the area have increased this month. Derwent reservoir recorded the largest increase from 61.4% to 70.8% and fell just below average for January. All the other reservoirs in the area are above average for the time of year. The Durham group and Cow Green reservoirs are at 100% capacity.

Reservoir or reservoir group	Percentage of current stocks	Percentage of previous month stocks
Kielder	90.7	88.4
North Tynedale group	92.4	87.6
Derwent	70.8	61.4
Durham group	100	97.9
Lune and Balder group	98.5	96.9
Cow Green	100	96.7

2 Rainfall

2.1 Rainfall map

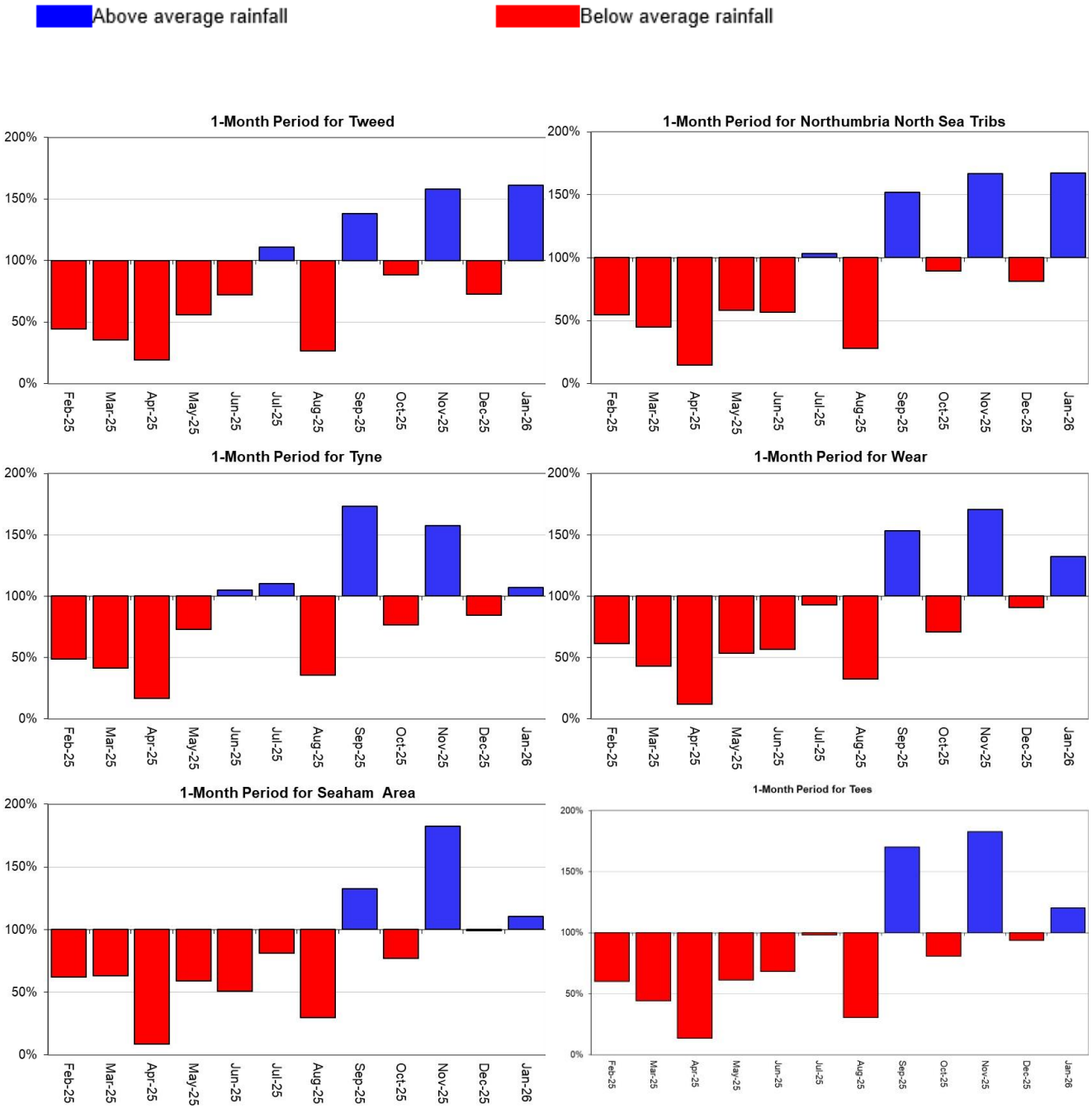
2.1: Total rainfall for hydrological areas for the current month (up to 31 January 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. The number on the maps refer to the percentage of the 1991 to 2020 LTA. January totals were classed as notably high for the Tweed and Northumbria North Sea Tribs catchments, above normal for the Wear and Tees, and normal for Tyne and Seaham catchments. Table available in the appendices with detailed information.



Rainfall data for January 2025 onwards, 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).

2.2 Rainfall charts

2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each hydrometric catchment in the North East area.



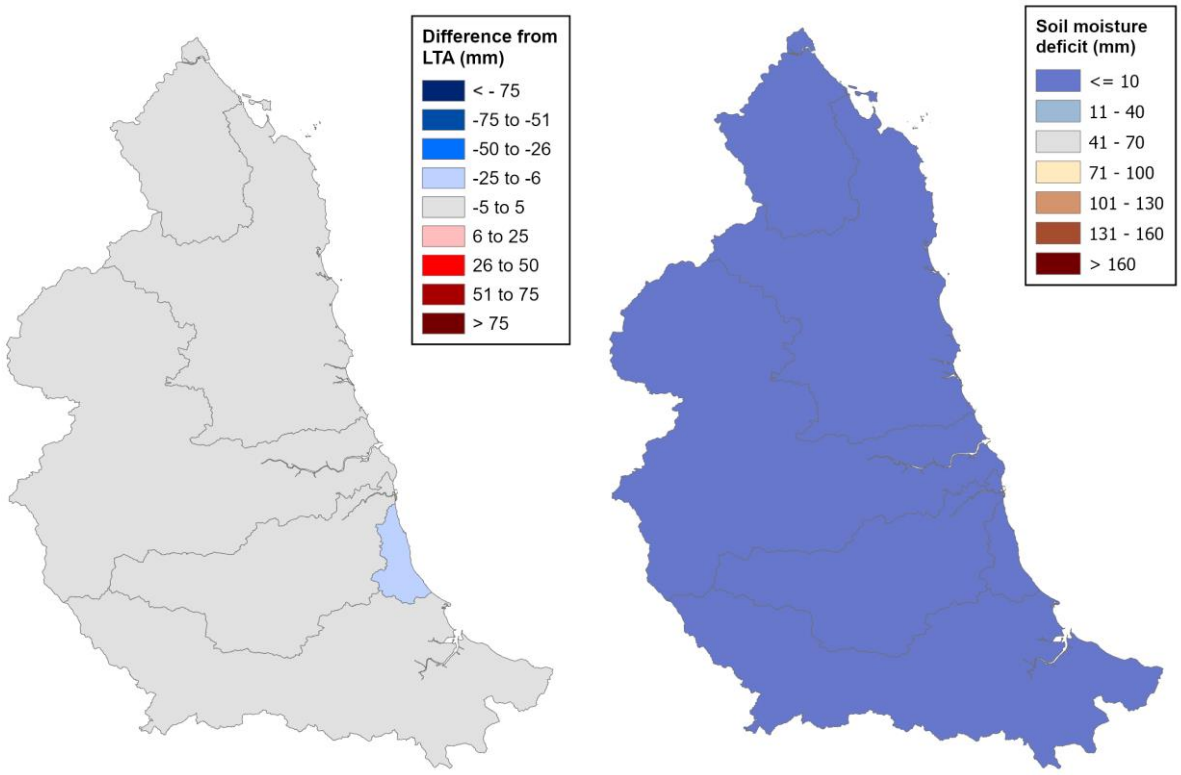
Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 2026). Rainfall data prior to January 2025, extracted from Met

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

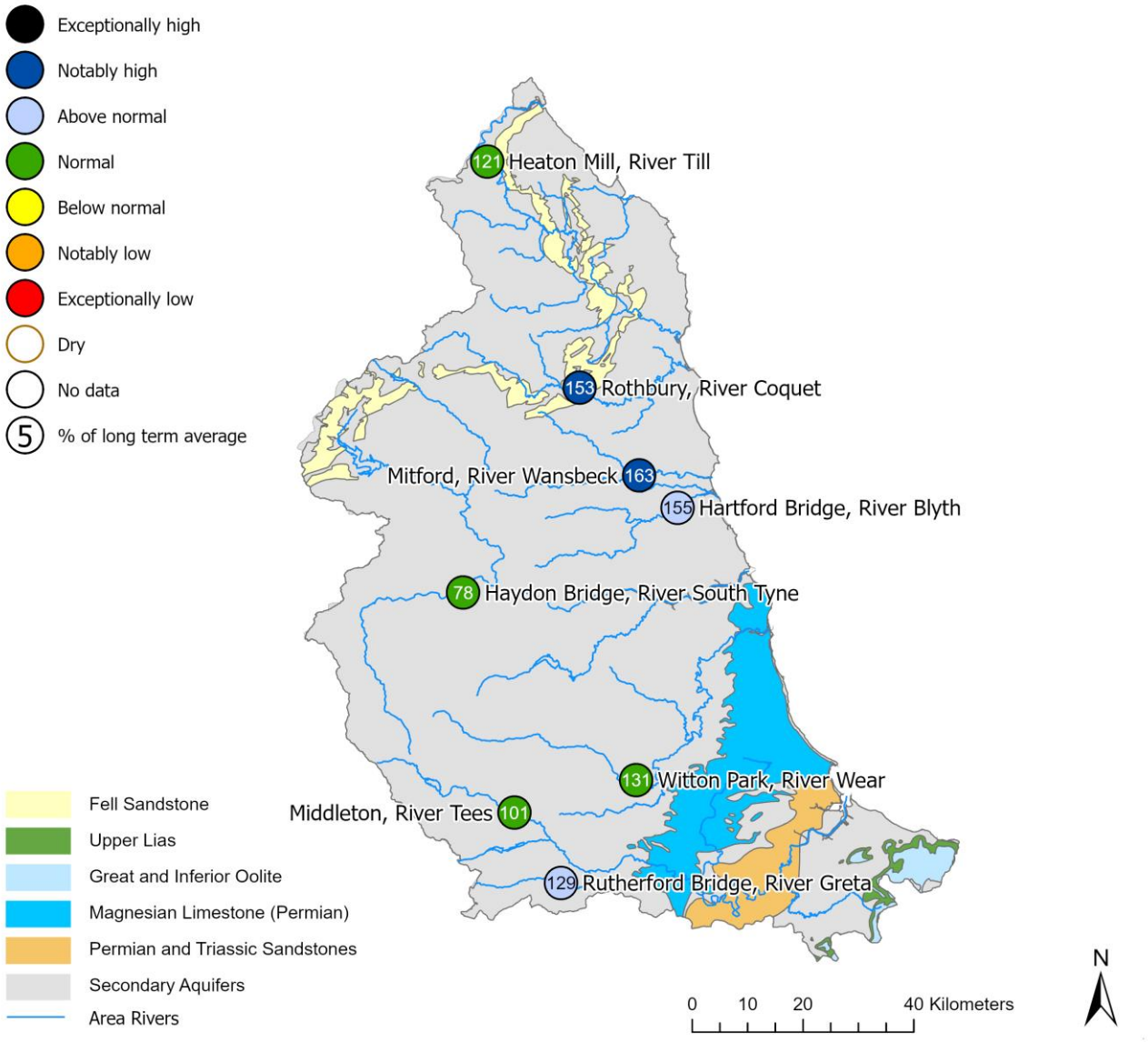
3.1: Soil moisture deficits for week ending 31 January 2026. Map on the left shows the difference (mm) of the actual soil moisture deficit from the 1991 to 2020 long term average soil moisture deficits. The whole area is classed as fully saturated. MORECS data for real land use.



4 River flows

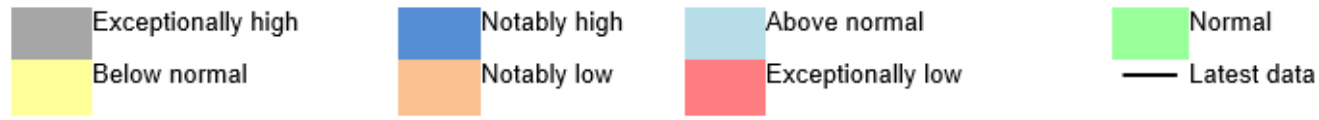
4.1 River flows map

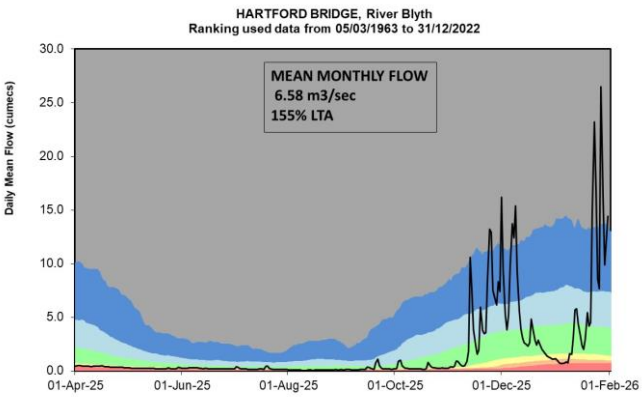
4.1: Monthly mean river flow for indicator sites for January 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic January monthly means. Monthly mean flows are classed as notably high at Rothbury on the River Coquet and at Mitford on the River Wansbeck. Hartford Bridge on the River Blyth and Rutherford Bridge on the River Greta are classed as above normal. Monthly mean flows are classed as normal at Heaton Mill on the River Till, Haydon Bridge on the River South Tyne, Witton Park on the River Wear and at Middleton on the River Tees. Table available in the appendices with detailed information.

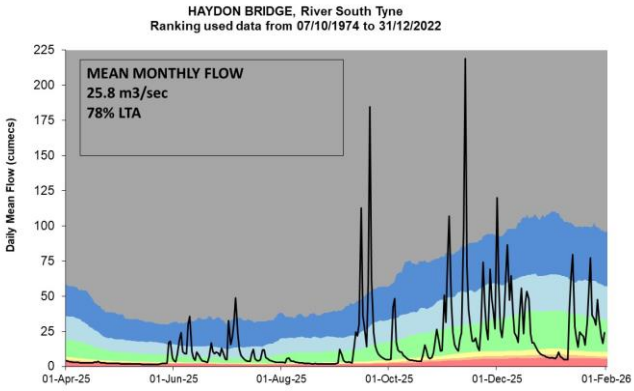


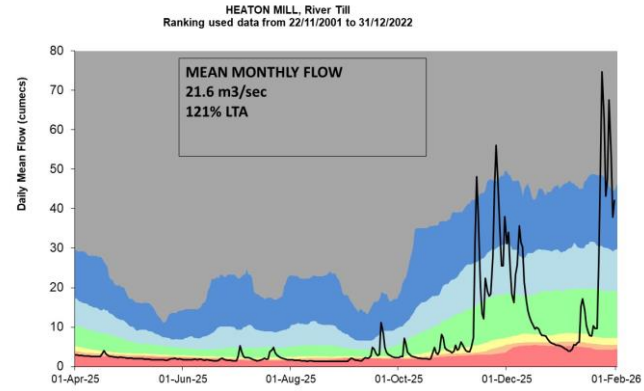
4.2 River flow charts

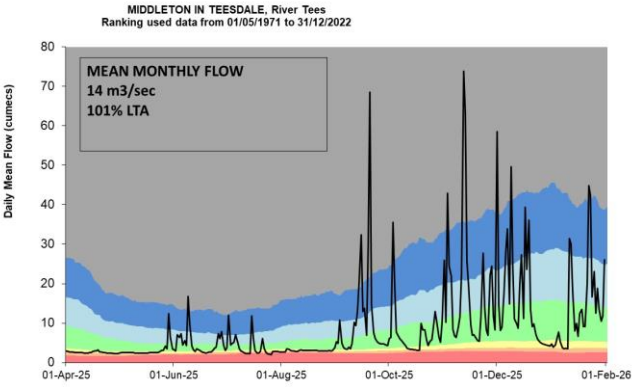
4.2: Daily mean river flow for index sites over the past 10 months, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

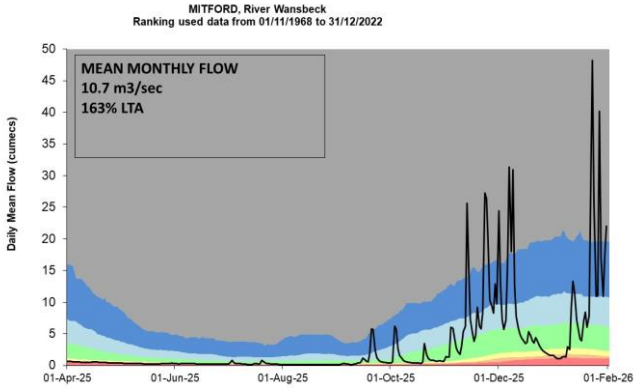


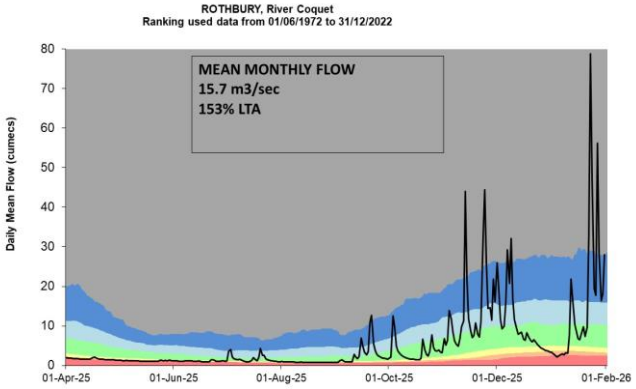


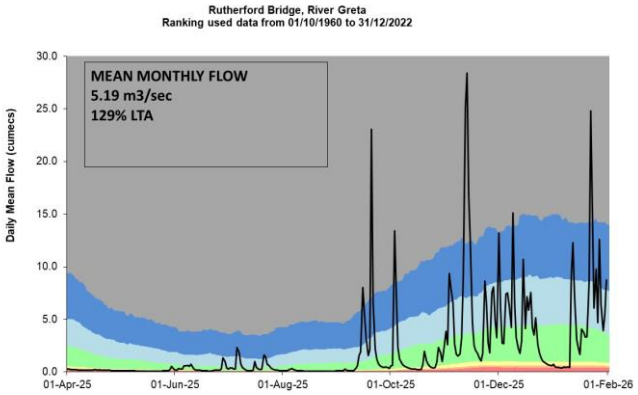


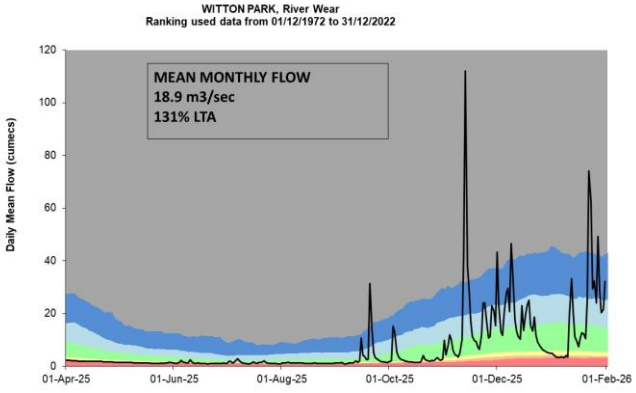










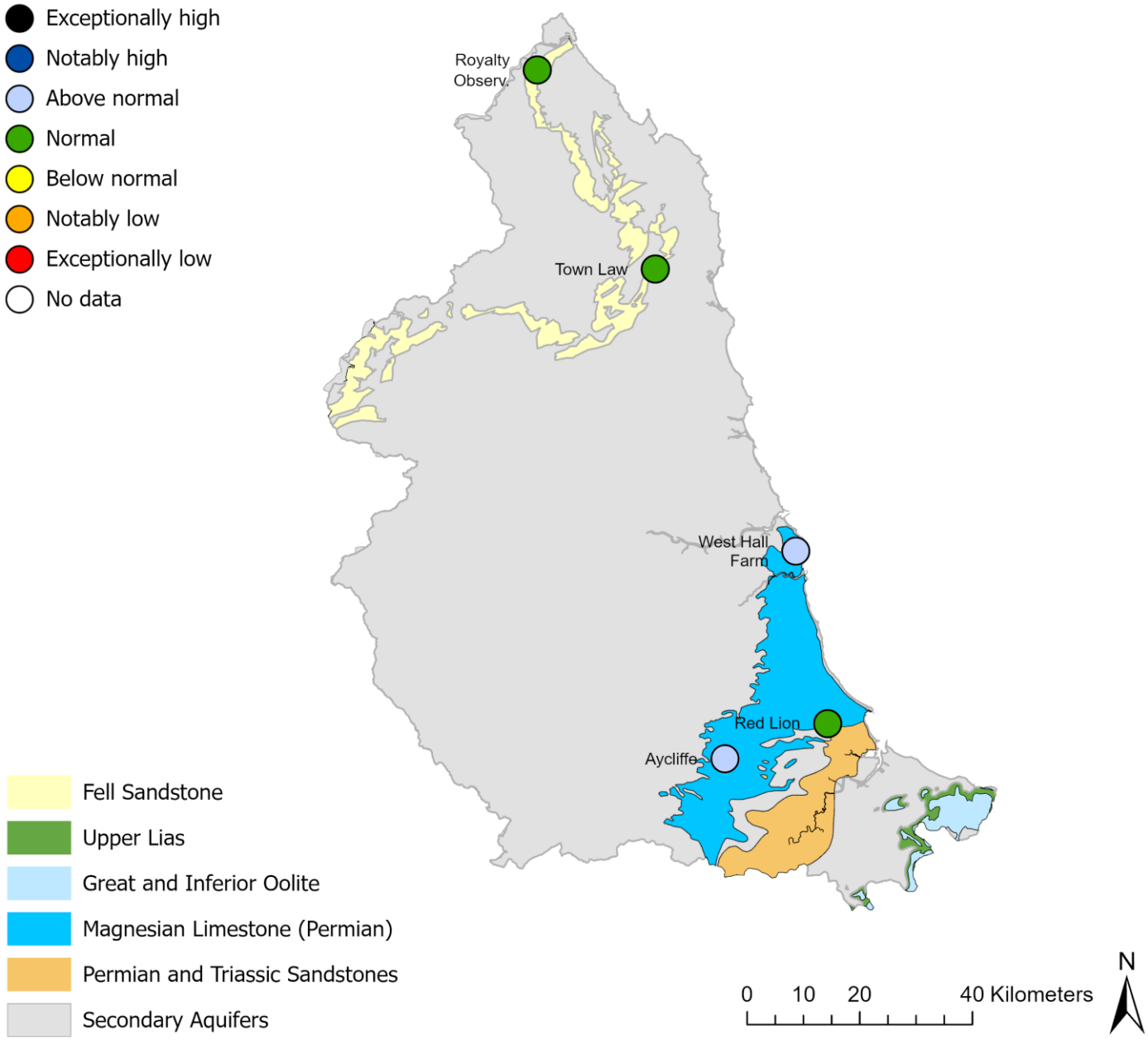


(Source: Environment Agency).

5 Groundwater levels

5.1 Groundwater levels map

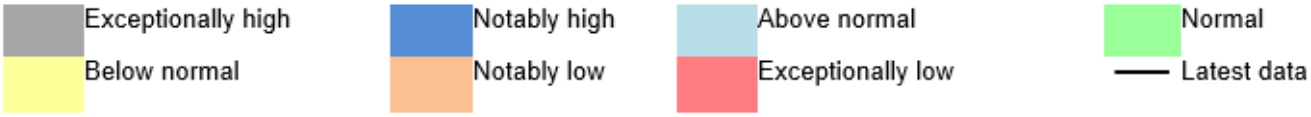
5.1: Groundwater levels for indicator sites at the end of January 2026, classed relative to an analysis of respective historic January levels. Groundwater levels are above normal at West Hall Farm and Aycliffe. All other sites are classed as normal for the time of the year. Table available in the appendices with detailed information.

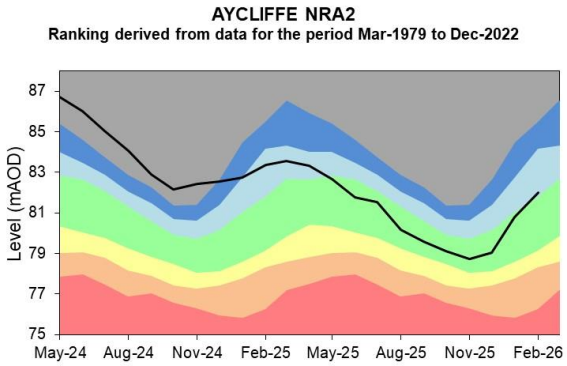


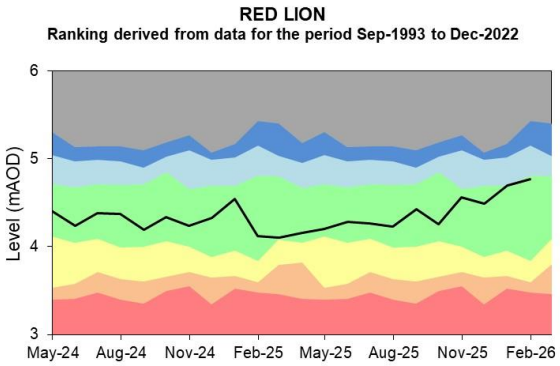
(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2026.

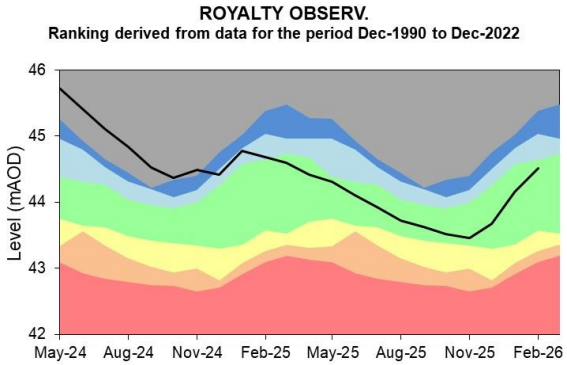
5.2 Groundwater level charts

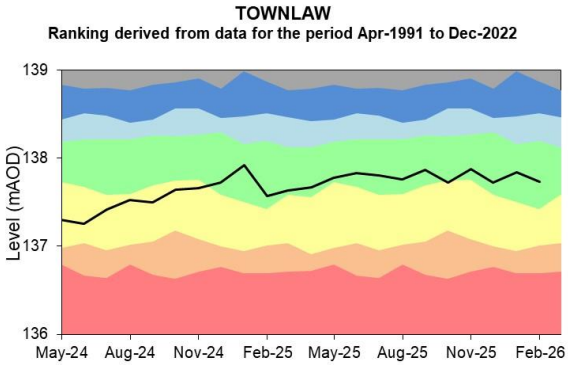
5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.

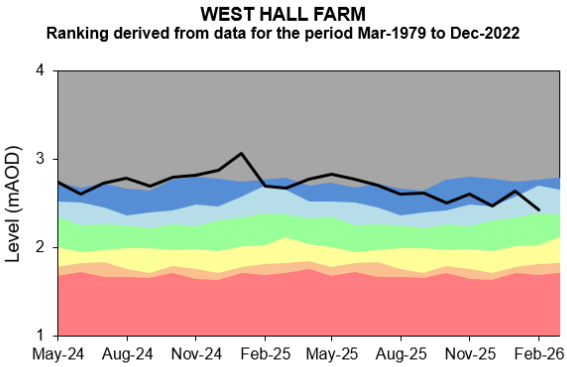








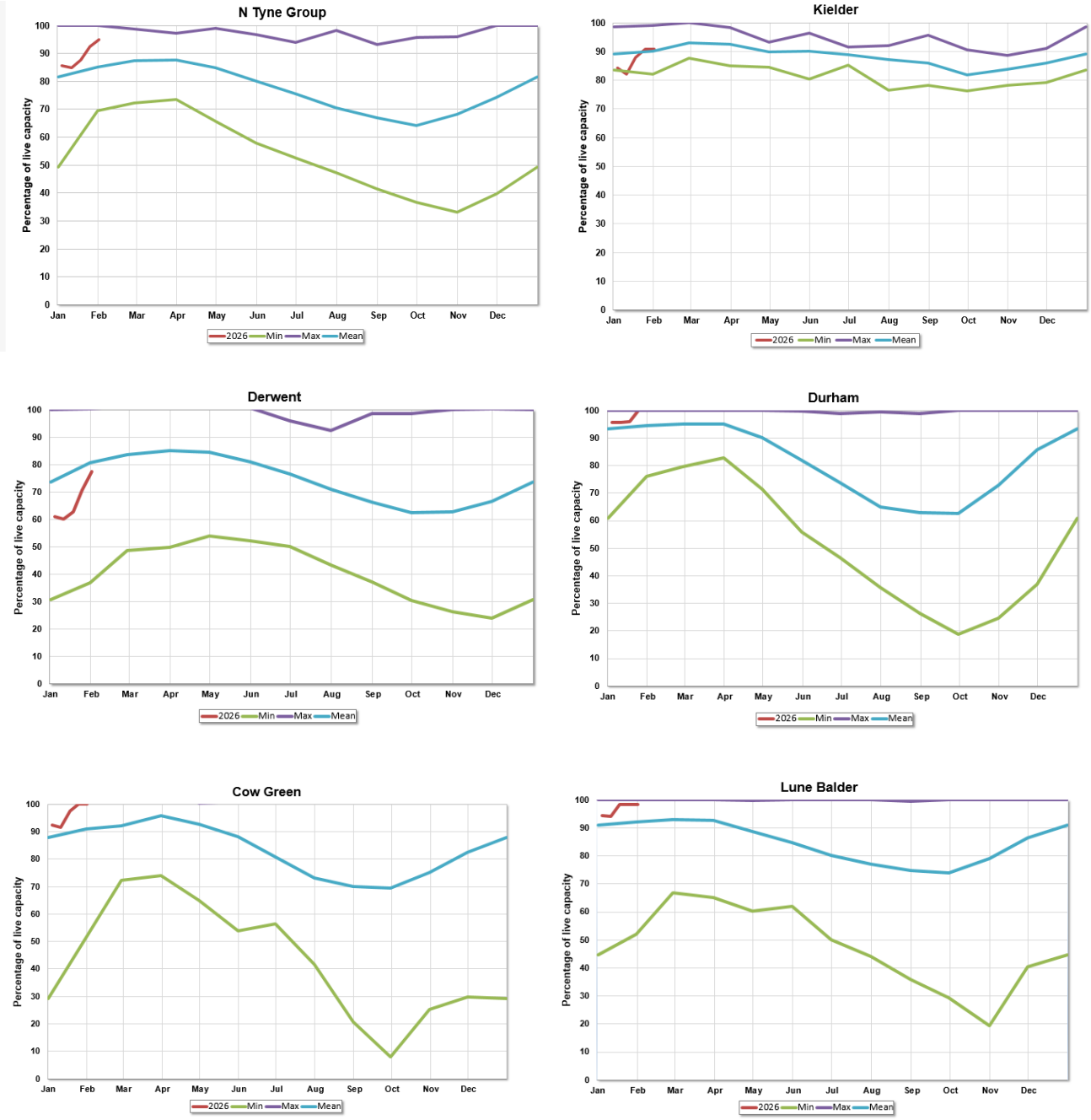




(Source: Environment Agency, 2026).

6 Reservoir stocks

6.1: End of month regional reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.



(Source: water company).

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
Northumbria North Sea Tribs	167	Notably High	Notably high	Above normal	Below normal
Seaham Area	111	Normal	Notably high	Normal	Below normal
Tees	120	Above Normal	Notably high	Above normal	Normal
Tweed	161	Notably High	Notably high	Normal	Below normal
Tyne	107	Normal	Notably high	Above normal	Normal
Wear	132	Above Normal	Notably high	Above normal	Below normal

8.2 River flows table

Site name	River	Catchment	Jan 2026 band	Dec 2025 band
Hartford Bridge	Blyth	Blyth	Above normal	Above normal
Haydon Bridge	South Tyne	South Tyne	Normal	Normal
Heaton Mill	Till	Till	Normal	Normal
Middleton In Teesdale	Tees	Tees	Normal	Above normal
Mitford	Wansbeck	Wansbeck	Notably high	Above normal
Rothbury	Coquet	Coquet	Notably high	Normal
Rutherford Bridge	Greta	Greta	Above normal	Normal
Witton Park	Wear	Wear	Normal	Normal

8.3 Groundwater table

Site name	Aquifer	End of Jan 2026 band	End of Dec 2025 band
Aycliffe Nra2	Skerne Magnesian Limestone	Above normal	Normal
Red Lion	Skerne Magnesian Limestone	Normal	Above normal
Royalty Observ.	Till Fell Sandstone	Normal	Normal
Townlaw	Till Fell Sandstone	Normal	Normal
West Hall Farm	Wear Magnesian Limestone	Above normal	Notably high