

Monthly water situation report: North East Area

1 Summary - May 2026

May was a dry month for the north of the area, with a little more rainfall recorded in the south. May rainfall totals were classed as above normal in the Seaham catchment, below normal in the Tweed catchment, and normal across the rest of the area. Monthly mean river flows decreased across all indicator sites this month falling within the normal, below normal, notably low, and exceptionally low ranges. Soil moisture deficits increased across the area. All reservoirs recorded a decrease in reservoir stocks this month. Groundwater levels fell within the below normal range at Townlaw and above normal at all other indicator sites.

1.1 Rainfall

Monthly rainfall totals were below the long term average (LTA) across the Tweed, Northumbria North Sea Tribs, and Tyne catchments. Monthly rainfall totals were above the LTA across the Wear, Seaham, and Tees catchments. Monthly totals ranged from 67% of the LTA in the Tweed catchment to 155% of the LTA in the Seaham catchment. Analysis of the daily rainfall totals shows that low rainfall totals were recorded across the area on the first 15 days, with highest totals of the month generally recorded on 19 and 20 May. The remainder of the month was predominantly dry with little or no rainfall recorded on most days.

Cumulative 3 month totals were classed as below normal for the Tweed and Northumbria North Sea Tribs catchments and normal for the rest of the area.

1.2 Soil moisture deficit and recharge

Soils became drier this month with the soil moisture deficits increasing across all catchments. The soil moisture deficit was between 71 to 100mm in the Seaham catchment and between 41 and 70mm across all other catchments.

1.3 River flows

Monthly mean river flows decreased across all indicator sites this month falling within the normal, below normal, notably low, and exceptionally low ranges. Monthly mean flows ranged from 34% of the LTA at Hartford Bridge in the River Blyth catchment to 79% of the LTA at Middleton in Teesdale in the River Tees catchment.

Analysis of daily mean flows shows that flows were in the below normal range across all sites, with the exception of Middleton in Teesdale which fell in the normal range at the beginning of May. Daily mean flows decreased over the first 2 weeks of the month across all sites. A small increase in daily mean flows was recorded on 19 May, particularly at Middleton in Teesdale following a period of rainfall. Following this period, flows decreased steadily towards the end of

the month with indicator sites falling within the below normal, notably low, or exceptionally low ranges at the end of May.

1.4 Groundwater levels

Groundwater levels varied across the area this month. Groundwater levels increased at Aycliffe, Red Lion, and Townlaw. Levels decreased at West Hall Farm and Royalty Observation. Townlaw on the Till Fell Sandstone remains in the below normal banding. All other groundwater sites are classed as above normal for the end of May.

1.5 Reservoir stocks

All reservoirs recorded a decrease in reservoir stocks this month. The largest decrease was recorded in the Durham group which fell from 92.9% to 77.7% at the end of May. Stocks in the North Tynedale group, Kielder, and Derwent reservoirs remain above average for the time of year. The Durham group, Cow Green, and Lune and Balder group all fell below average for the time of year.

Transfers from the Kielder transfer tunnel to support the stock in Waskerley reservoir in the Durham group began at the end of May.

Reservoir or reservoir group	Percentage of current stocks	Percentage of previous month stocks
Kielder	91.5	92.6
North Tynedale group	81.0	88.2
Derwent	82.8	89.4
Durham group	77.7	92.9
Lune and Balder group	78.5	91.5
Cow Green	83.3	95

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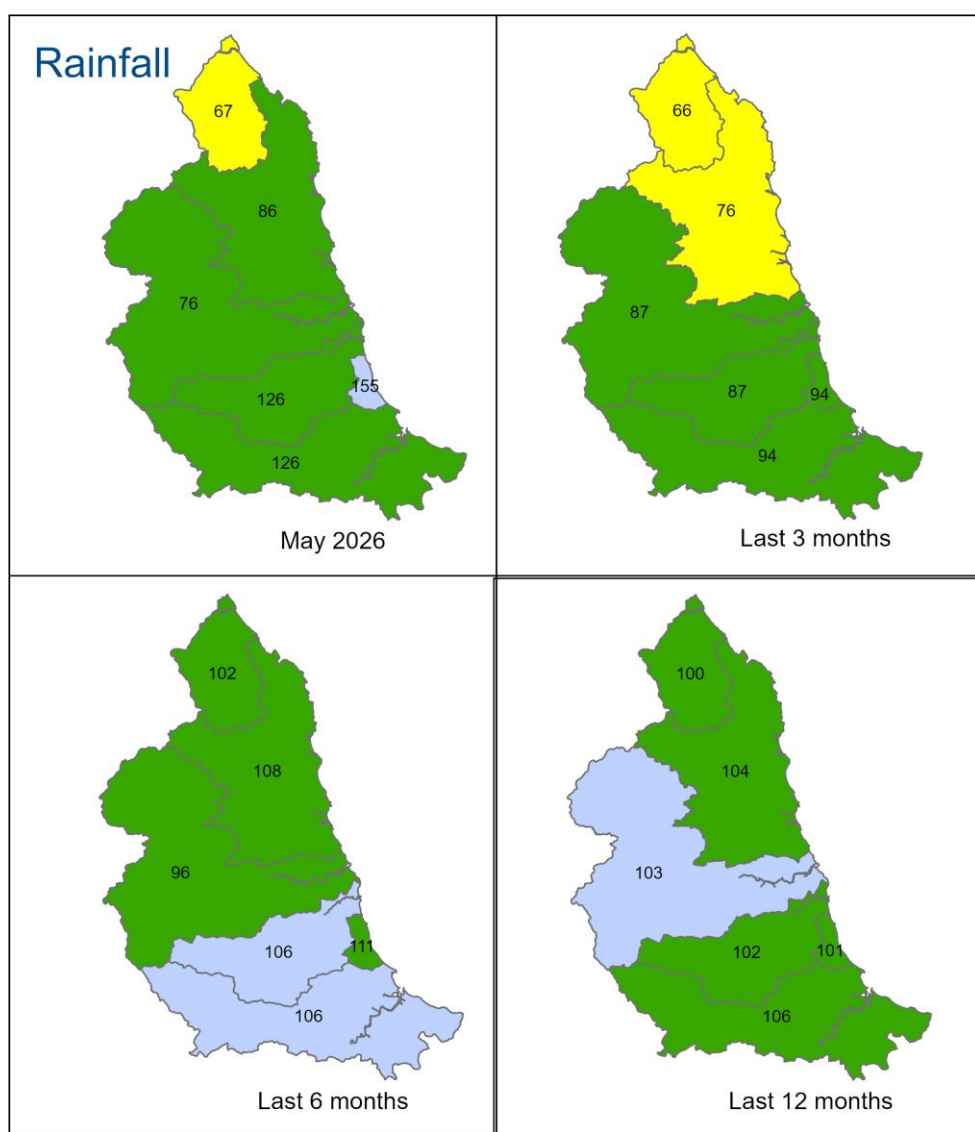
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2 Rainfall

2.1 Rainfall map

2.1: Total rainfall for hydrological areas for the current month (up to 31 May 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. The numbers on the maps refer to the percentage of the 1991 to 2020 LTA. May totals were classed as above normal in the Seaham catchment, below normal in the Tweed catchment, and normal across the rest of the area. 3 month cumulative totals were classed as below normal for the Tweed and Northumbria North Sea Tribs catchments and normal for the rest of the area.



Exceptionally high Above normal Below normal Exceptionally low
Notably high Normal Notably low

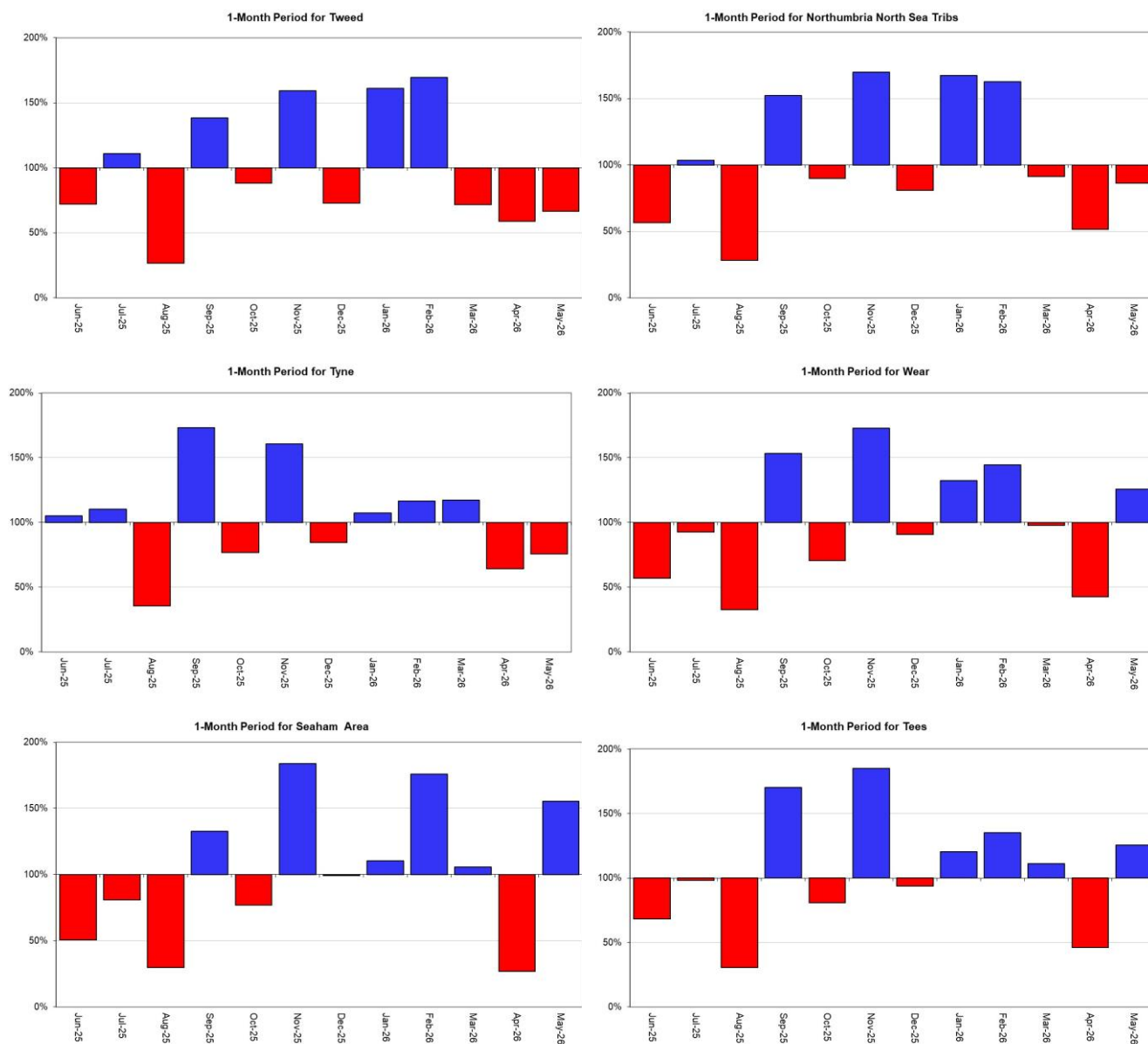
Rainfall extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026).

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 catchment.

■ Above average rainfall

■ Below average rainfall

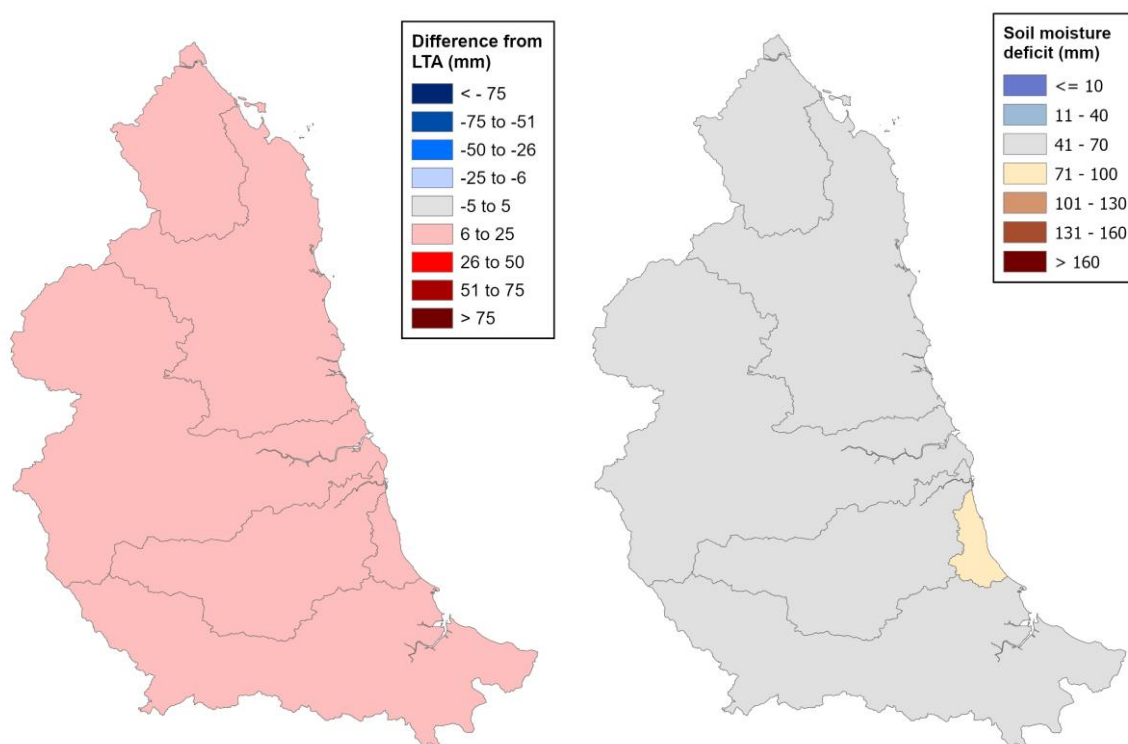


Rainfall data extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 2026).

3 Soil moisture deficit

3.1 Soil moisture deficit map

3.1: Soil moisture deficits for week ending 2 June 2026. Map on the left shows the difference (mm) of the actual soil moisture deficits from the 1991 to 2020 long term average soil moisture deficits. The whole area fell within the 6 to 25mm difference from the LTA (slightly drier than normal). The soil moisture deficit was between 71 to 100mm in the Seaham catchment and between 41 and 70mm across all other catchments. MORECS data for real land use.

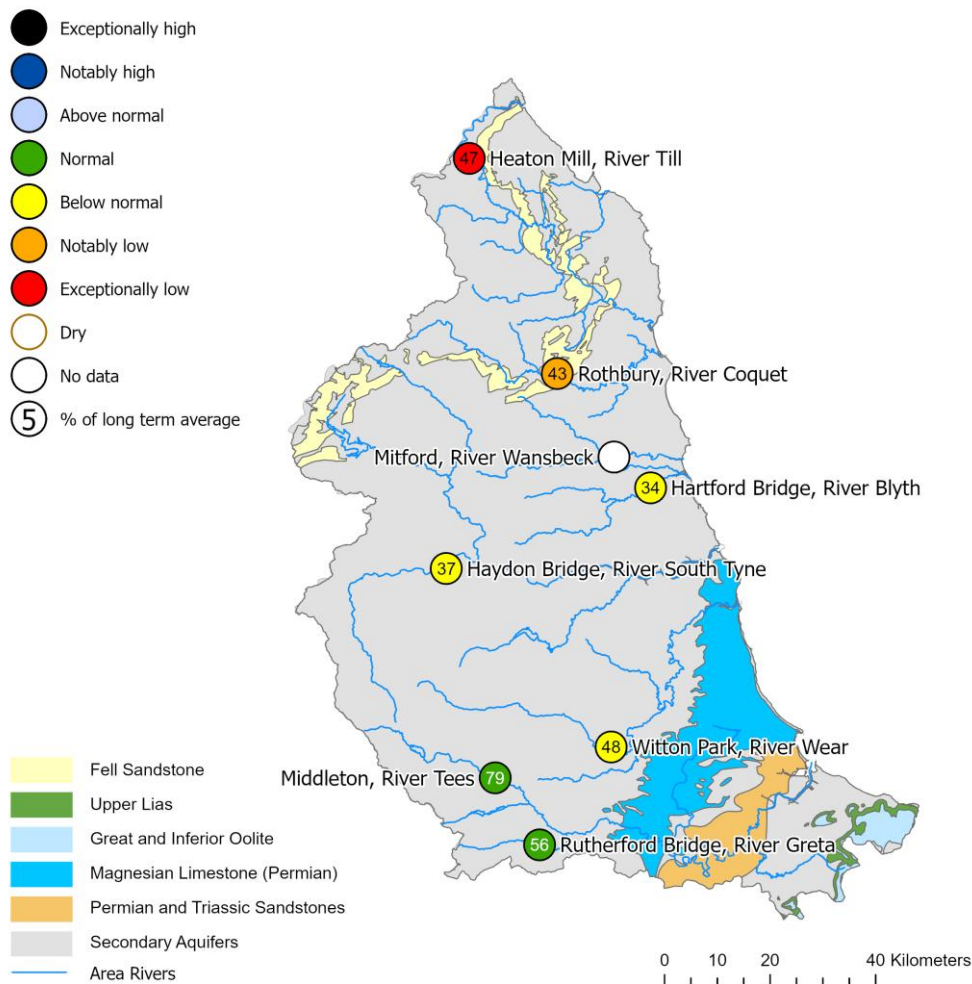


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4 River flows

4.1 River flows map

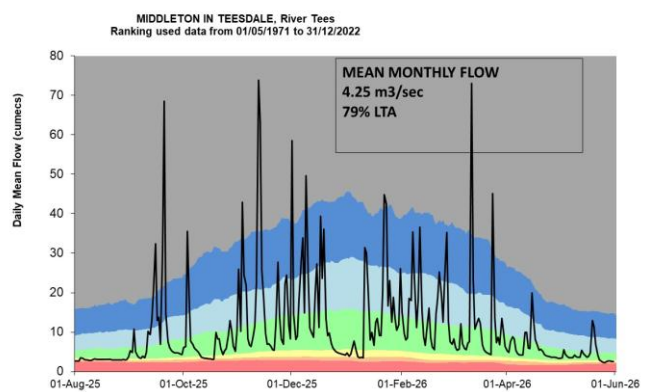
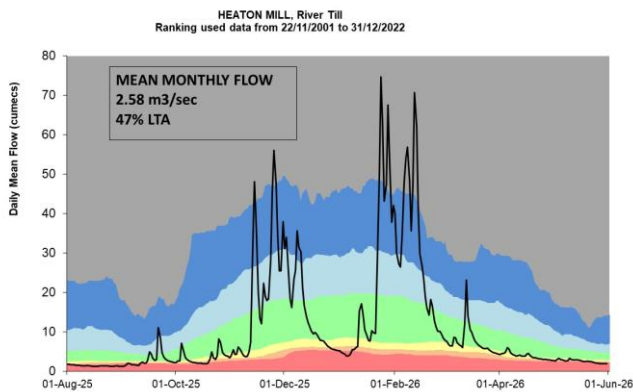
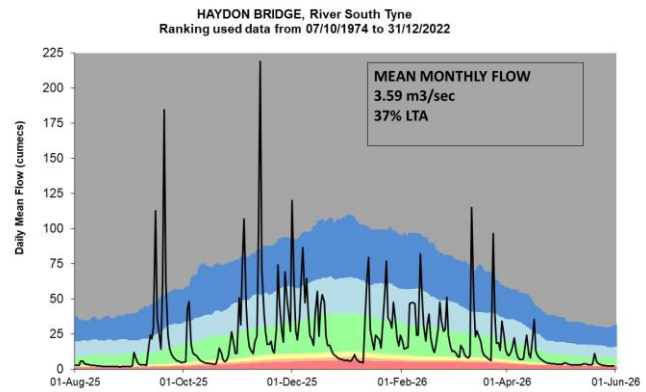
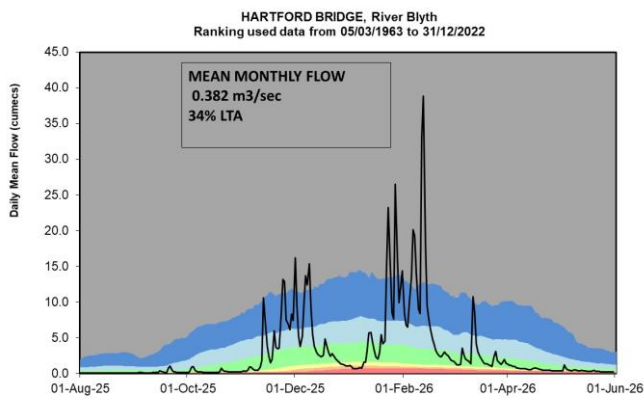
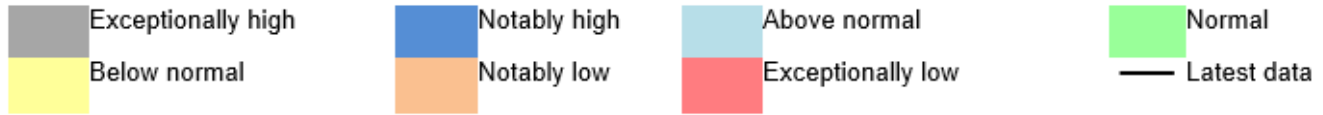
4.1: Monthly mean river flow for indicator sites for May 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic May monthly means. Monthly means were classed as exceptionally low at Heaton Mill, notably low at Rothbury, and below normal at Hartford Bridge, Haydon Bridge, and Witton Park. Monthly means were classed as normal at Middleton and Rutherford Bridge. A full month of data is not available at Mitford due to site issues. Table available in the appendices with detailed information.

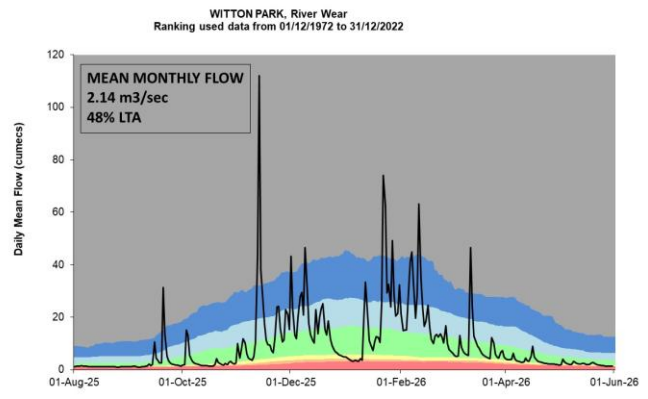
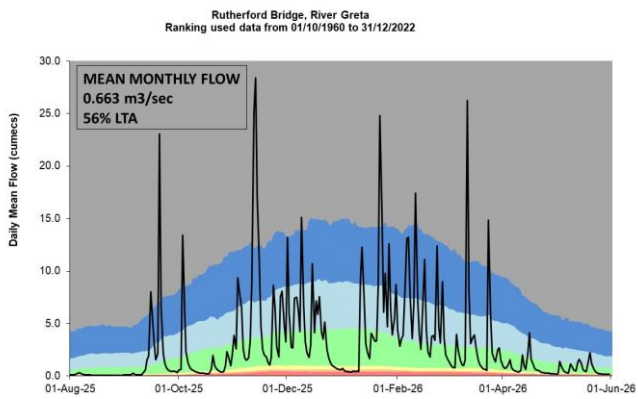
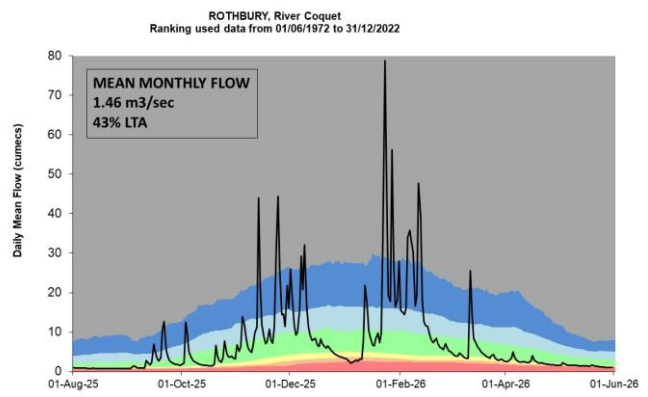
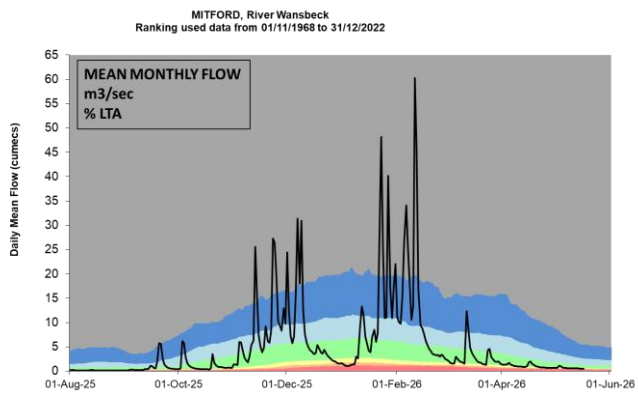


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4.2 River flow charts

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



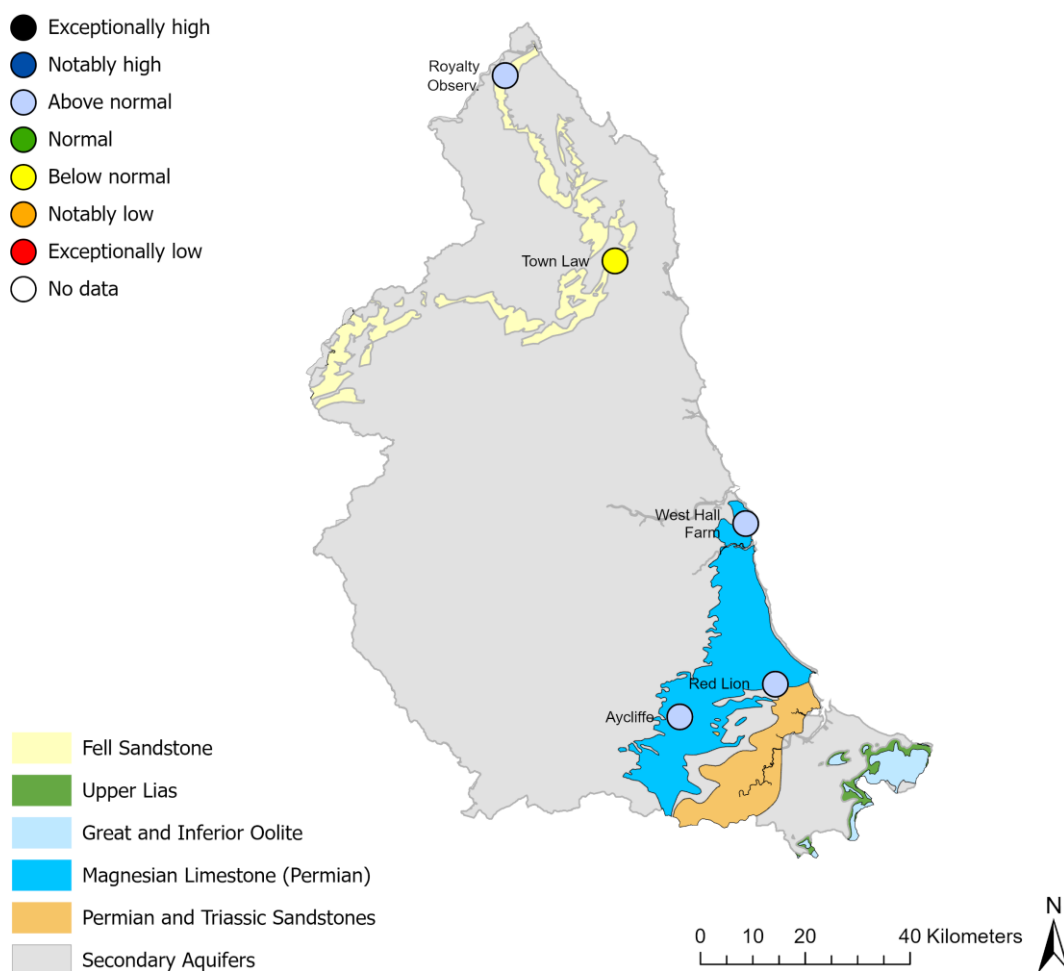


(Source: Environment Agency).

5 Groundwater levels

5.1 Groundwater levels map

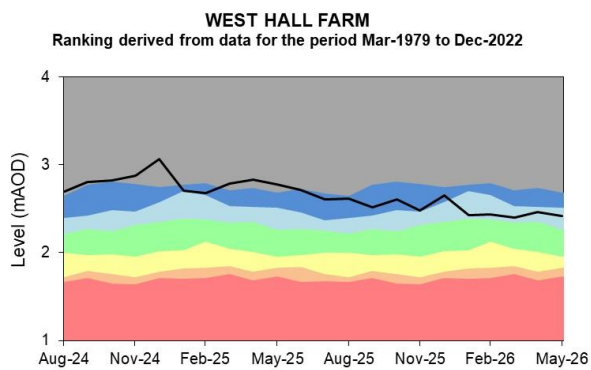
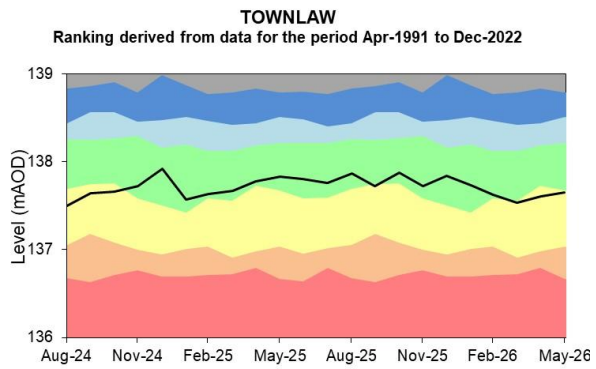
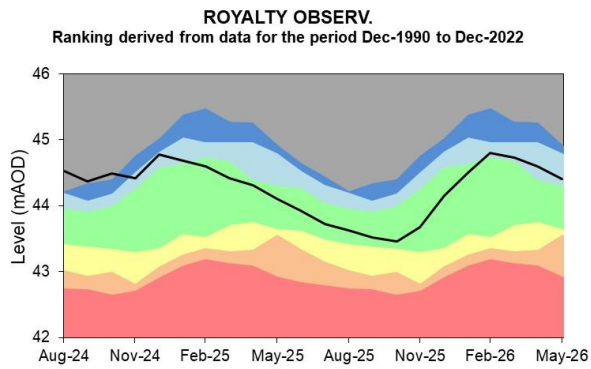
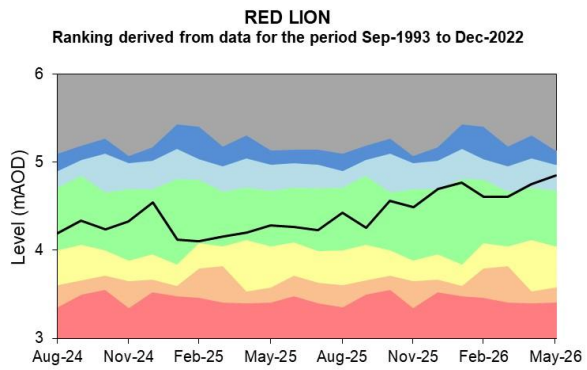
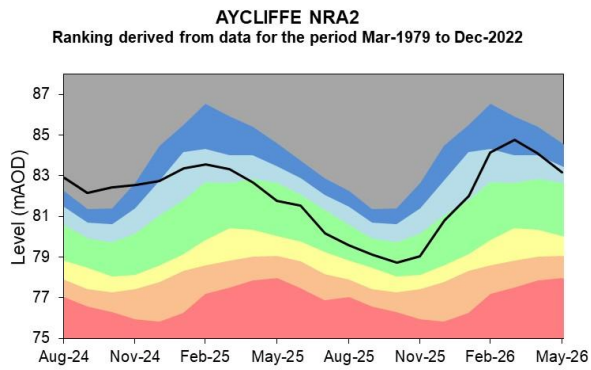
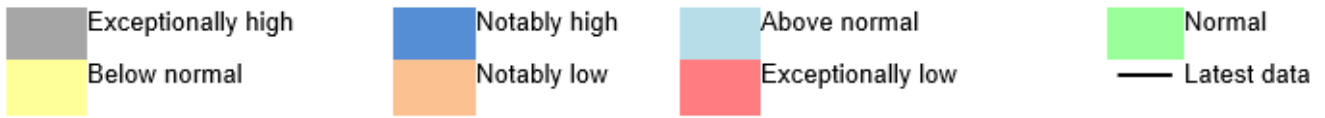
5.1: Groundwater levels for indicator sites at the end of May 2026, classed relative to an analysis of respective historic May levels. Groundwater levels were classed as below normal at Townlaw and above normal at Royalty Observation, West Hall Farm, Red Lion, and Aycliffe for the time of year. Table available in the appendices with detailed information.



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5.2 Groundwater level charts

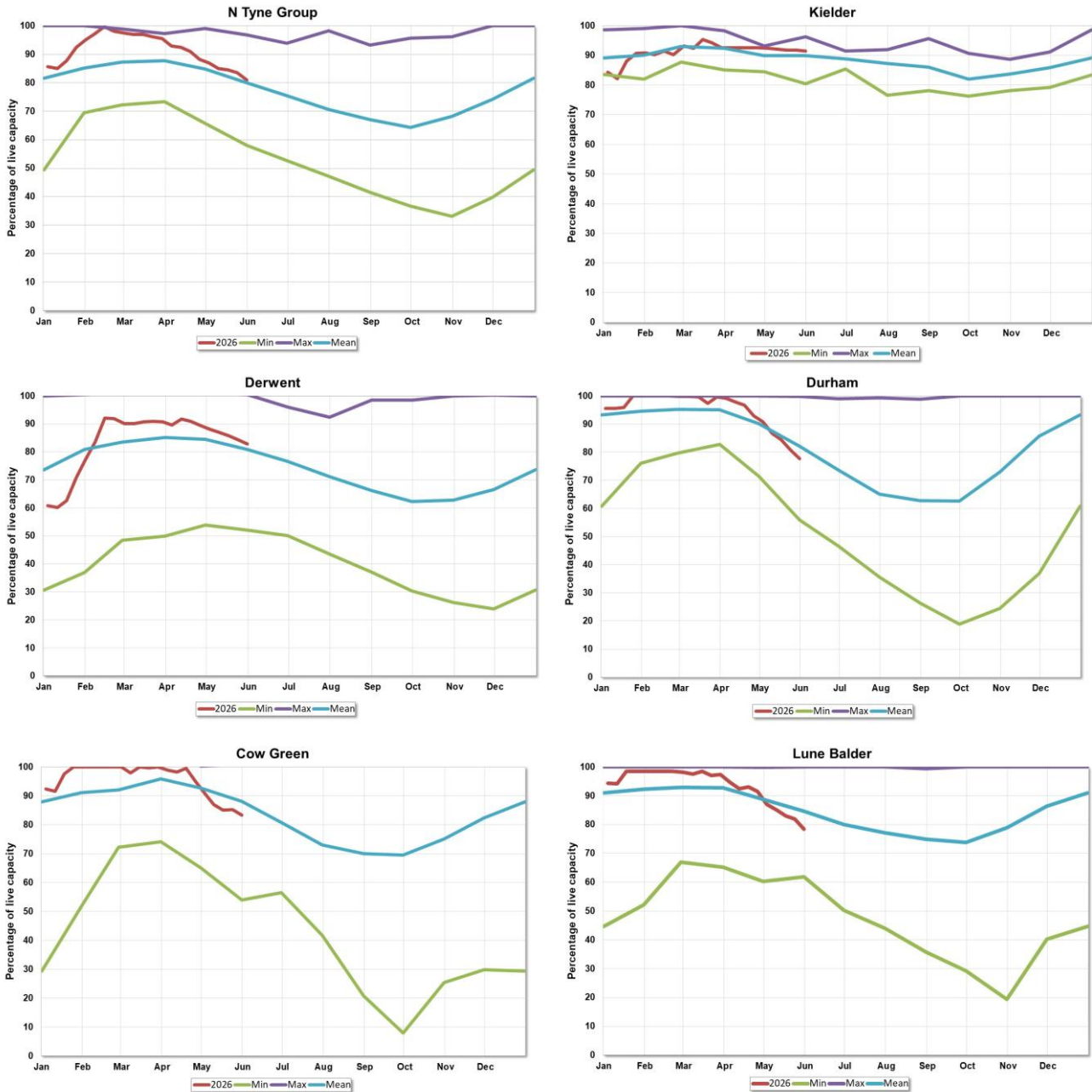
5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels.



(Source: Environment Agency, 2026).

6 Reservoir stocks

6.1: End of month reservoir stocks compared to long term maximum, minimum, and average stocks. Note: Historic records of individual reservoirs and reservoir groups 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	May 2026 rainfall % of long term average 1991 to 2020	May 2026 band	Mar 2026 to May cumulative band	Dec 2025 to May cumulative band	Jun 2025 to May cumulative band
Northumbria North Sea Tribs	86	Normal	Below normal	Normal	Normal
Seaham Area	155	Above normal	Normal	Normal	Normal
Tees	126	Normal	Normal	Above normal	Normal
Tweed	67	Below normal	Below normal	Normal	Normal
Tyne	76	Normal	Normal	Normal	Above normal
Wear	126	Normal	Normal	Above normal	Normal

8.2 River flows table

Site name	River	Catchment	May 2026 band	Apr 2026 band
Hartford Bridge	Blyth	Blyth	Below normal	Below normal
Haydon Bridge	South Tyne	South Tyne	Below normal	Normal
Heaton Mill	Till	Till	Exceptionally low	Below normal
Middleton In Teesdale	Tees	Tees	Normal	Normal
Mitford	Wansbeck	Wansbeck	N/A	Normal
Rothbury	Coquet	Coquet	Notably low	Below normal
Rutherford Bridge	Greta	Greta	Normal	Normal
Witton Park	Wear	Wear	Below normal	Below normal

8.3 Groundwater table

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