

Monthly water situation report: North East Area

1 Summary - April 2026

April was a dry month with below average rainfall recorded across all catchments. Cumulative 3-month rainfall totals fell from notably high and above normal last month to within the normal range across the whole area. Monthly mean river flows decreased across all indicator sites, falling within the normal or below normal range. Soil moisture deficits increased across the area. Reservoir stocks decreased though remained above average for the time of year. Groundwater levels varied.

1.1 Rainfall

Monthly rainfall totals were below the long term average (LTA) across all catchments in the area. Totals for Seaham and Tees catchments were classed as notably low and below normal for all other catchments. Monthly totals ranged from 27% of the LTA in the Seaham catchment to 64% of the LTA in the Tyne catchment. Analysis of the daily rainfall totals shows that smaller rainfall totals were recorded across the area in the first 15 days with highest totals of the month generally recorded on 16 April. The remainder of the month was predominantly dry with little or no rainfall recorded on most days.

Cumulative 3 month totals were classed as normal across the whole area. Cumulative 6 month totals were classed as notably high across all catchments with the exception of Seaham which fell within the above normal range.

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 classed as 41 to 70mm in the Seaham catchment and between 11 and 40mm across all other catchments.

1.3 River flows

Monthly mean river flows decreased across all indicator sites this month falling within the normal and below normal ranges. Monthly mean flows ranged from 24% of the LTA at Hartford Bridge in the River Blyth catchment to 87% of the LTA at Middleton in Teesdale in the River Tees catchment.

Analysis of daily mean flows shows that flows were in the normal range across all sites at the beginning of April. Daily mean flows generally decreased over the first 2 weeks of the month. A small increase in daily mean flows was recorded on 16 April following a period of rainfall. Following this period flows decreased steadily towards the end of the month with all indicator sites falling within the normal, below normal or notably low ranges at the end of April.

1.4 Groundwater levels

Groundwater levels varied across the area this month. Groundwater levels increased at Red Lion, Townlaw and West Hall Farm. Levels decreased at Aycliffe and Royalty Observation. Aycliffe on the Skerne Magnesian Limestone still remains in the notably high banding and Townlaw on the Till Fell Sandstone remains in the below normal banding. All other indicator sites were classed as above normal for April.

1.5 Reservoir stocks

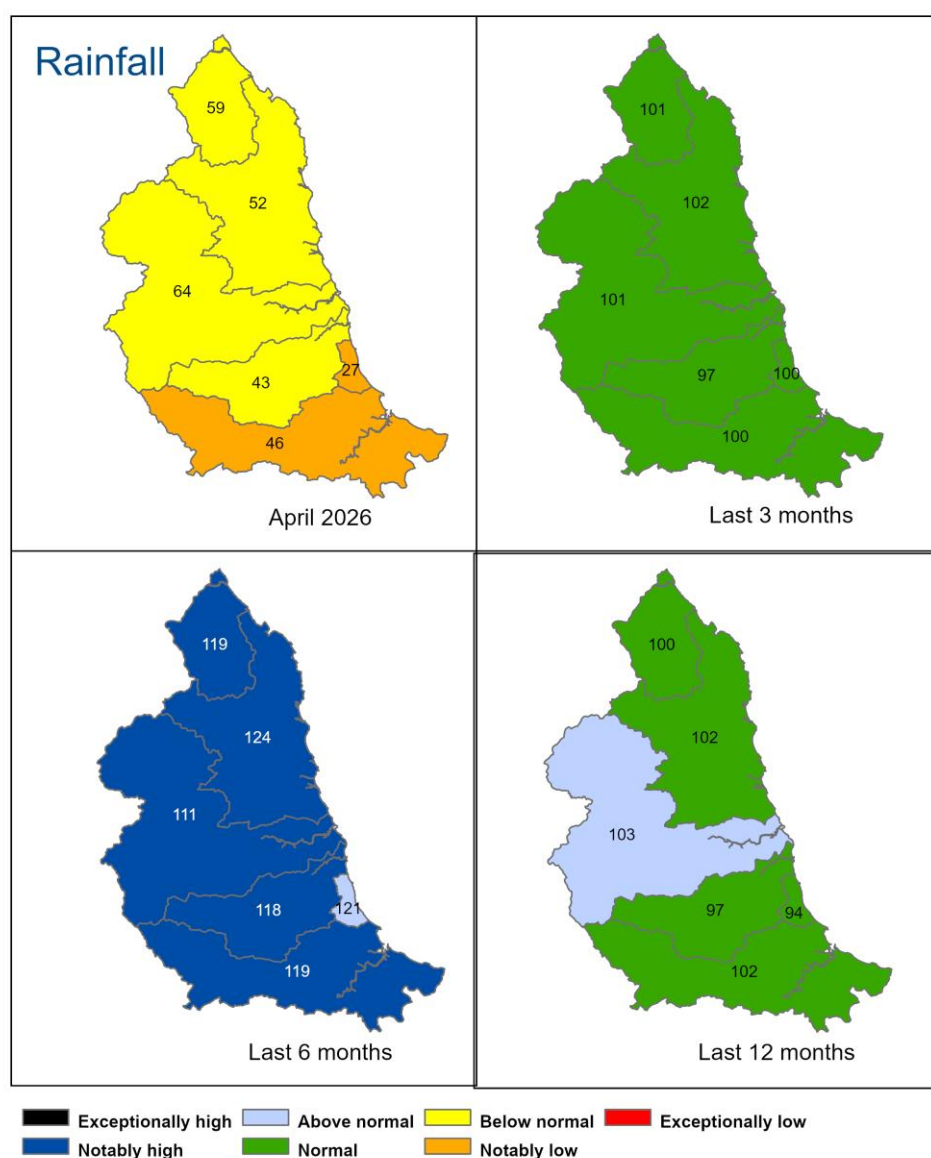
All reservoirs recorded a decrease in reservoir stocks this month with the exception of Kielder which remained the same as last month. The largest decrease was recorded at the North Tynedale group which fell from 95.4% to 88.2% at the end of April. All reservoir stocks remained above average for the time of year.

Reservoir or reservoir group	Percentage of current stocks	Percentage of previous month stocks
Kielder	92.6	92.6
North Tynedale group	88.2	95.4
Derwent	89.4	90.7
Durham group	92.9	99.7
Lune and Balder group	91.5	97.4
Cow Green	95	100

2 Rainfall

2.1 Rainfall map

2.1: Total rainfall for hydrological areas for the current month (up to 30 April 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. April totals were classed as below normal across the Tweed, Northumbria North Sea Tribs, Tyne and the Wear catchments. Monthly totals were classes as notably low in the Seaham and Tees catchments. 3 month cumulative totals were classed as normal across the whole area.



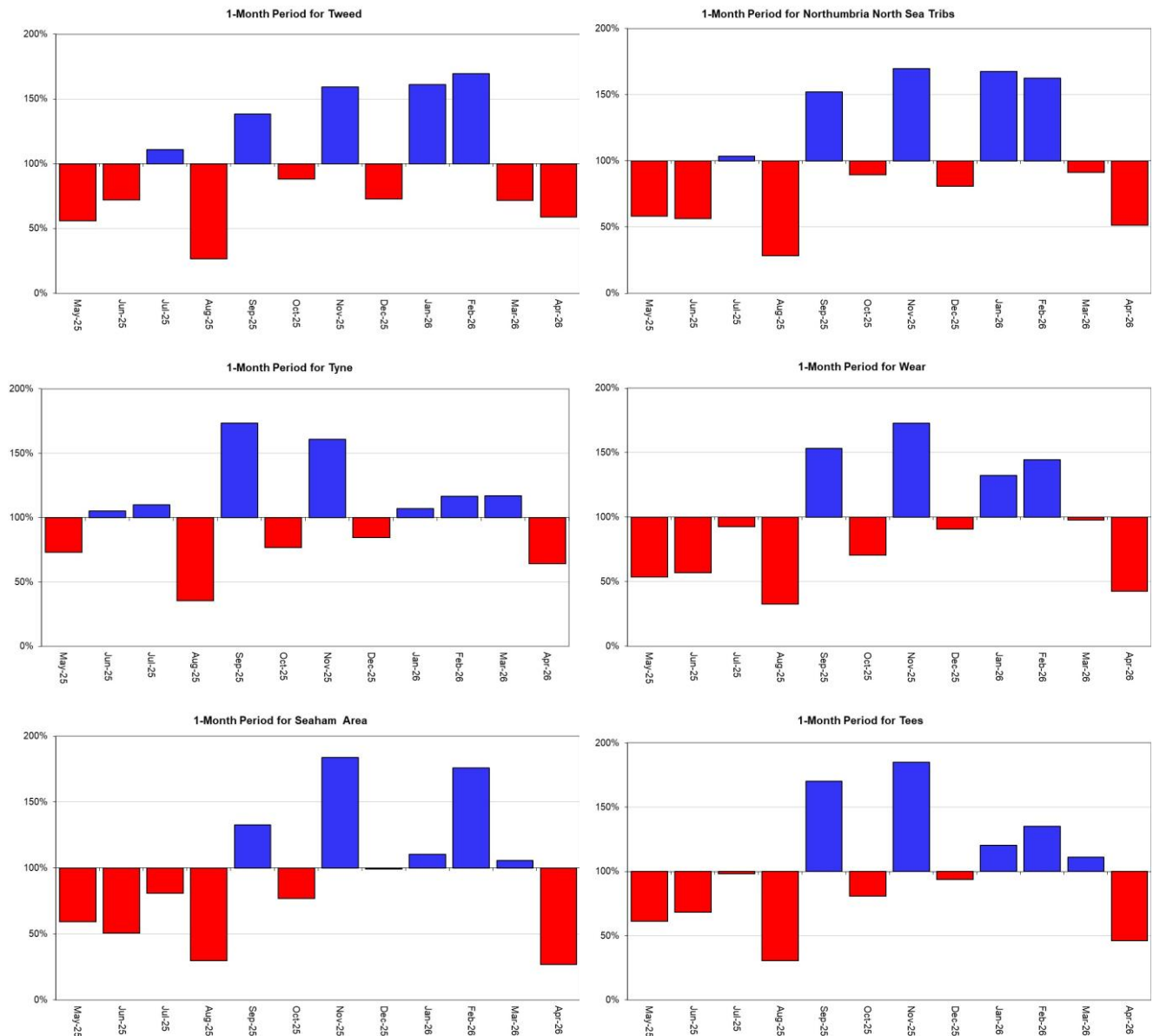
Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded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

■ Above average rainfall

■ Below average rainfall



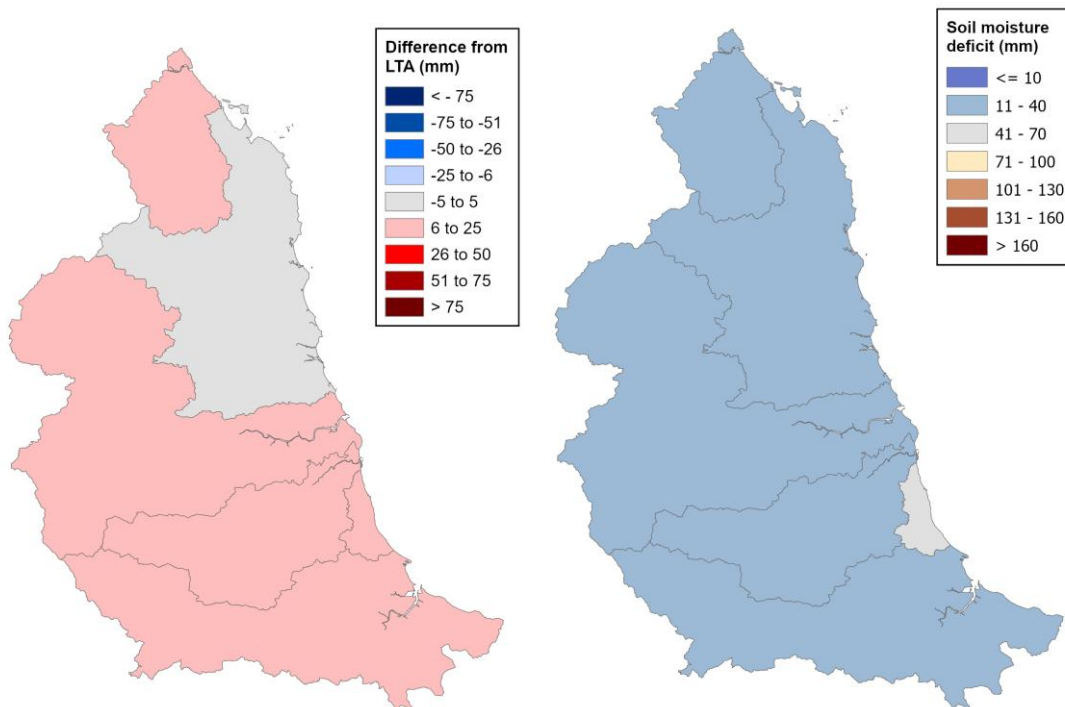
Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 2026). Rainfall data prior to January 2025, extracted from Met

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 30 April 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 Northumbria North Sea Tribs catchment was classed as between -5 to 5mm difference from the LTA. The rest of the area fell within the 6 to 25mm difference from the LTA. The soil moisture deficit was classed as 41 to 70mm in the Seaham catchment and between 11 and 40mm across all other catchments. MORECS data for real land use.

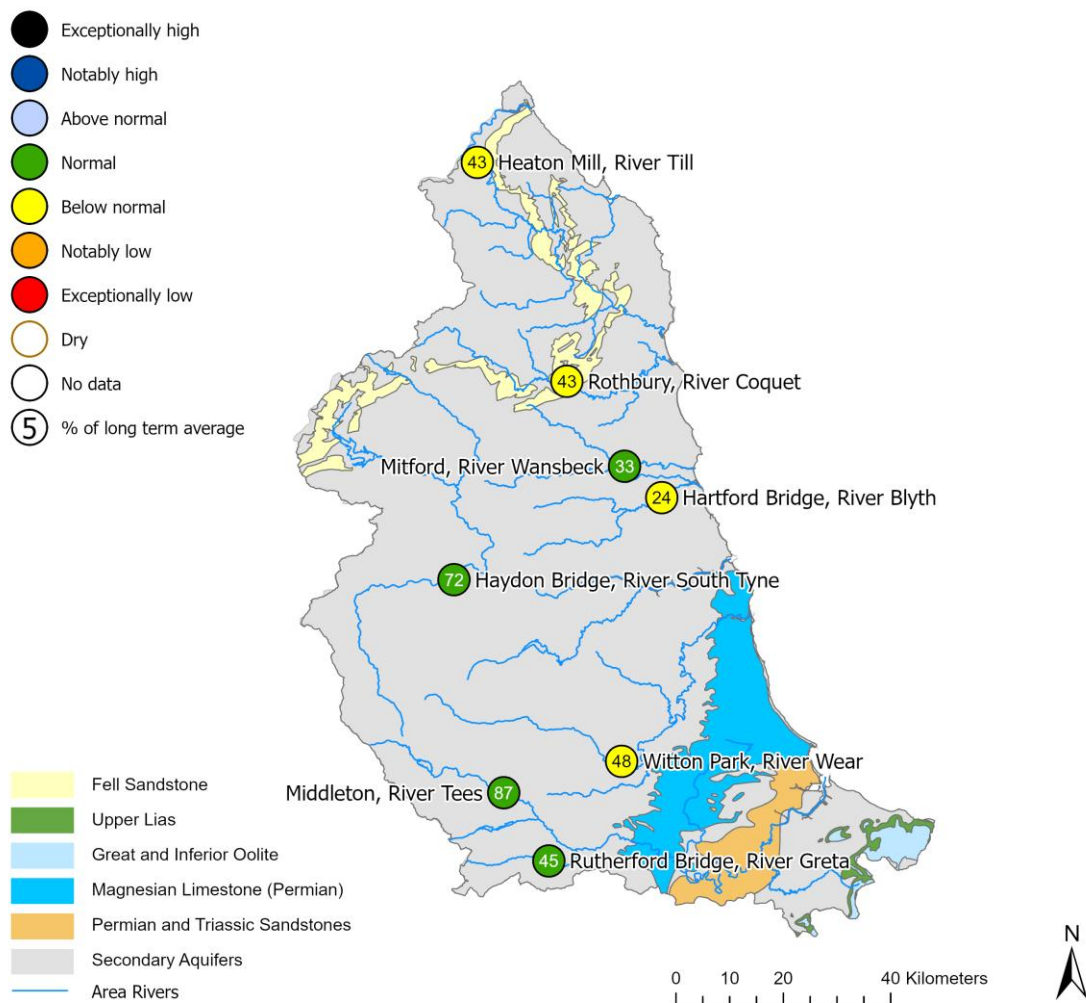


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4 River flows

4.1 River flows map

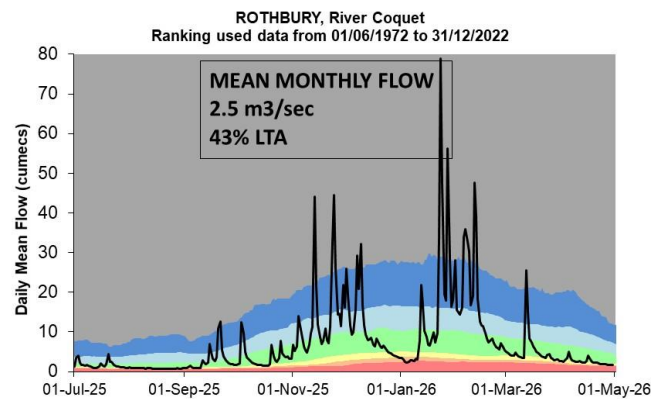
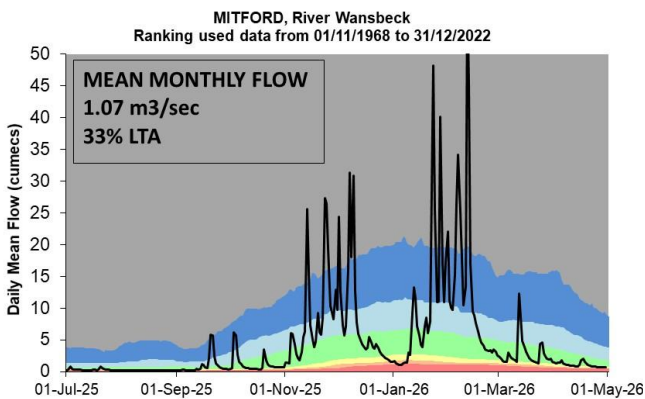
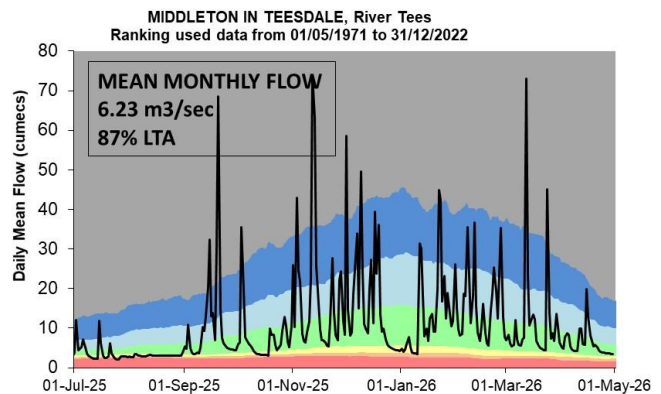
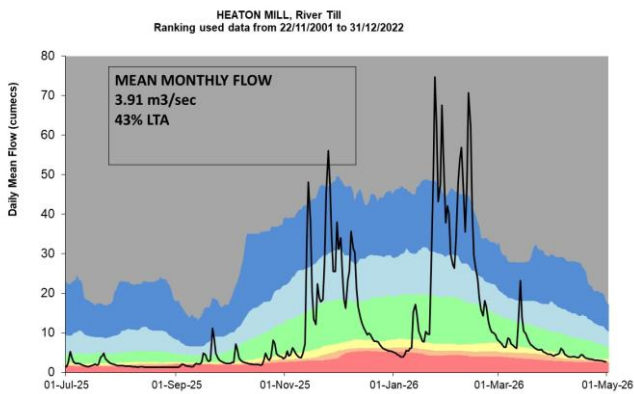
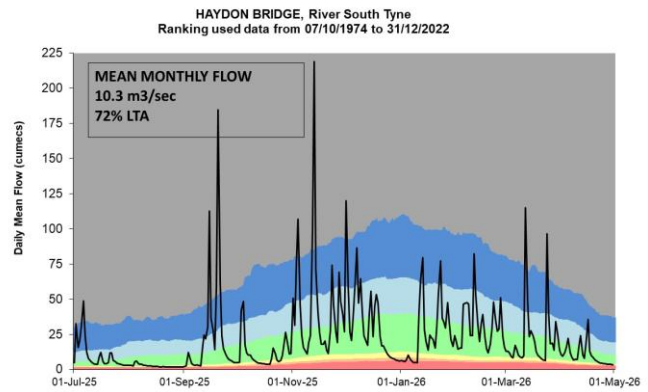
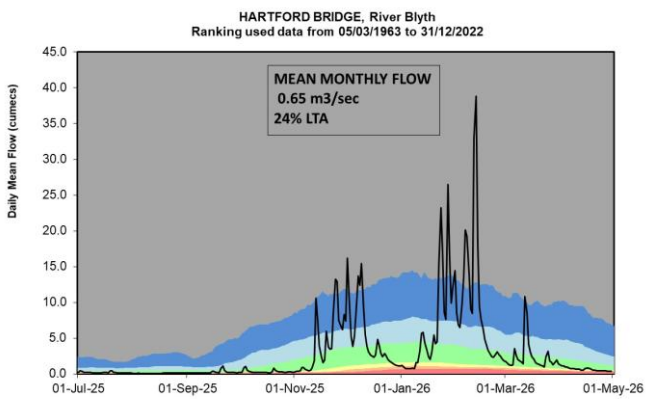
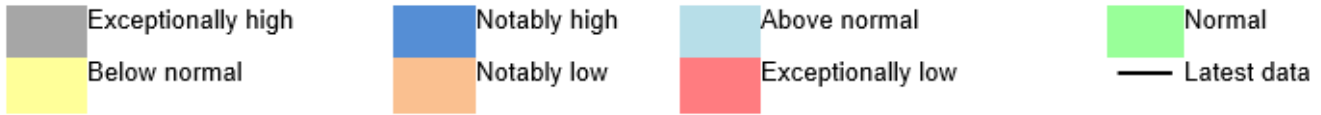
4.1: Monthly mean river flow for indicator sites for April 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic April monthly means. Monthly means were classed as below normal at Heaton Mill, Rothbury, Hartford Bridge and Witton Park. Monthly means were classed as normal at Mitford, Haydon Bridge, Middleton and Rutherford Bridge. Table available in the appendices with detailed information.

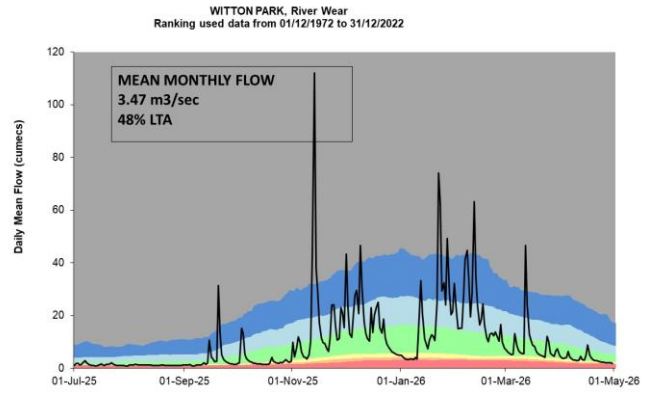
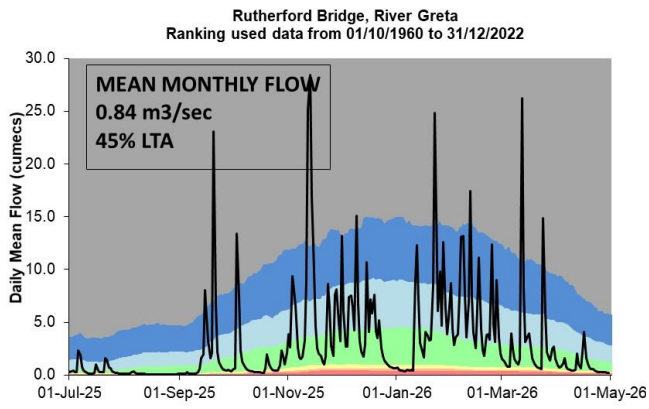


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4.2 River flow charts

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



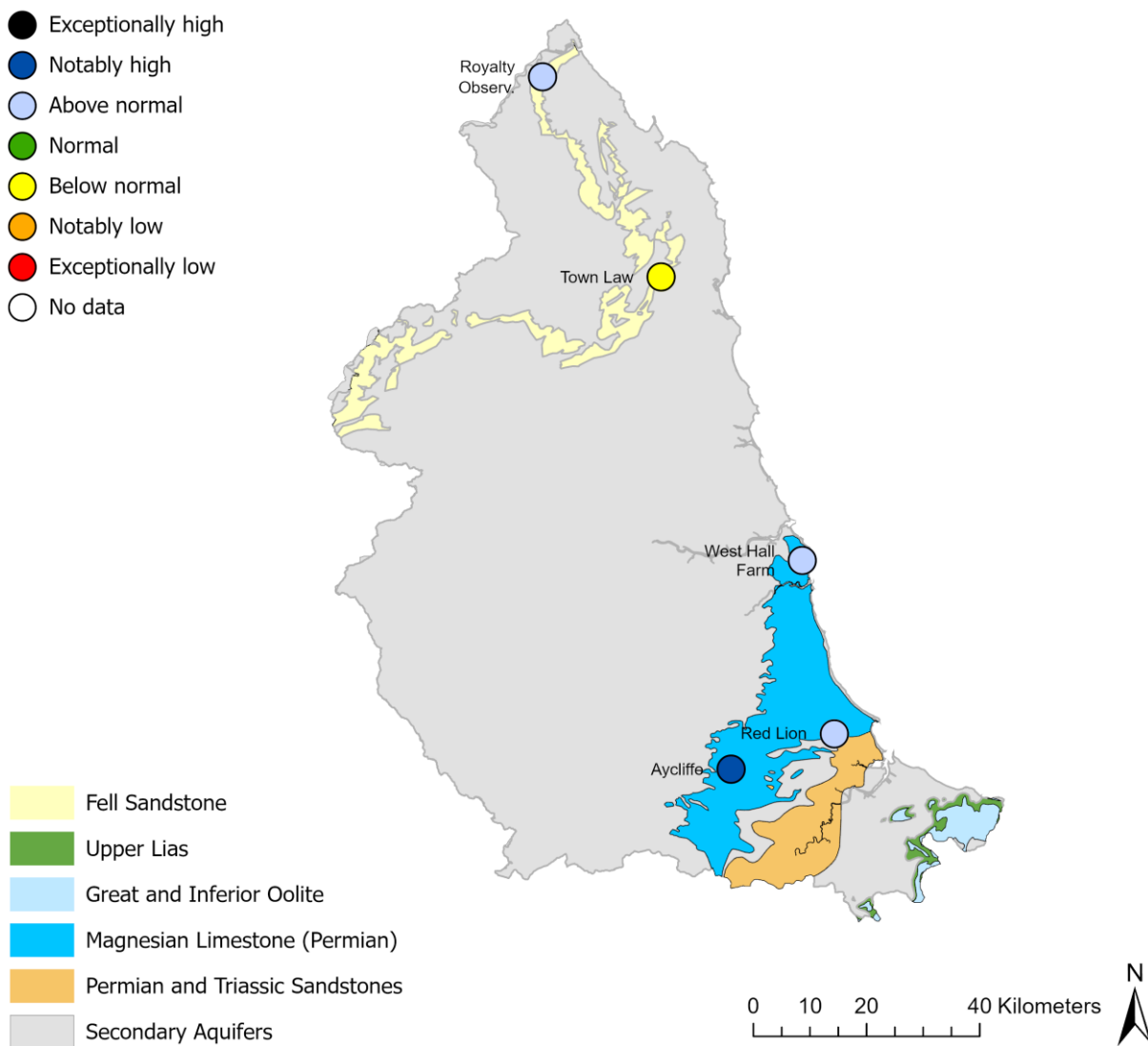


Source: Environment Agency).

5 Groundwater levels

5.1 Groundwater levels map

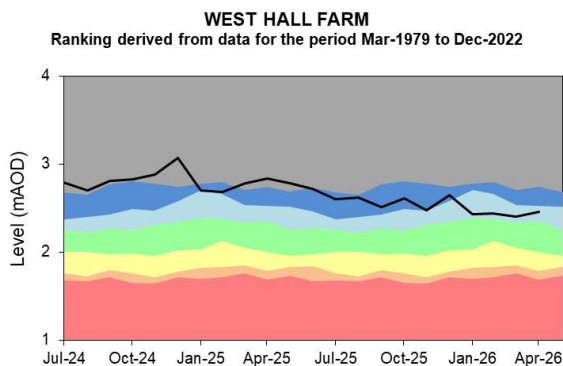
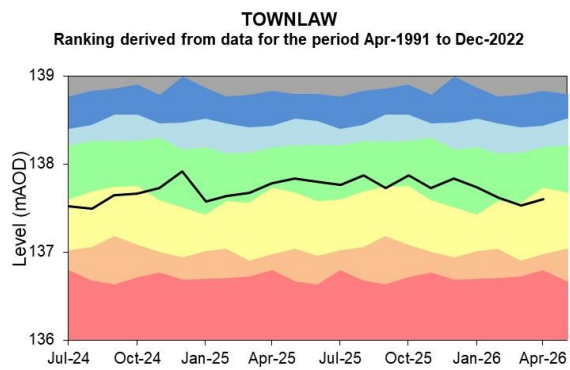
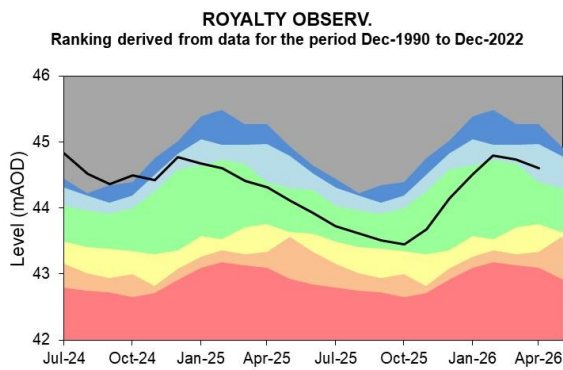
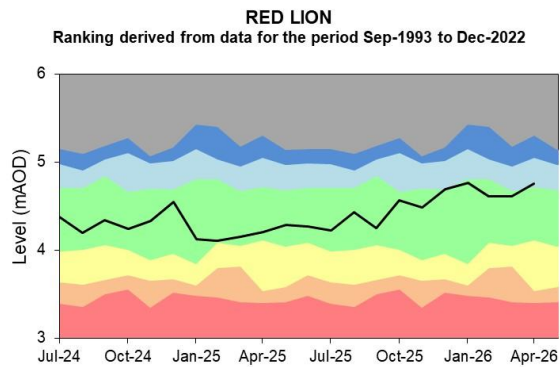
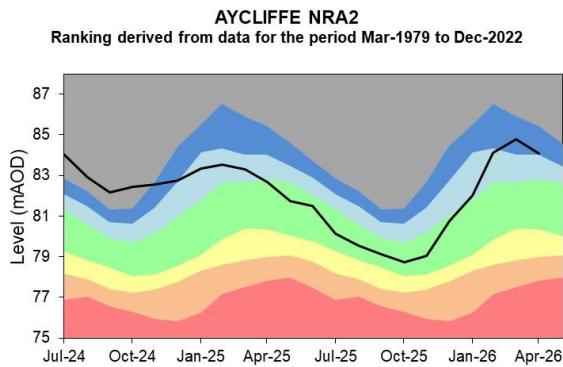
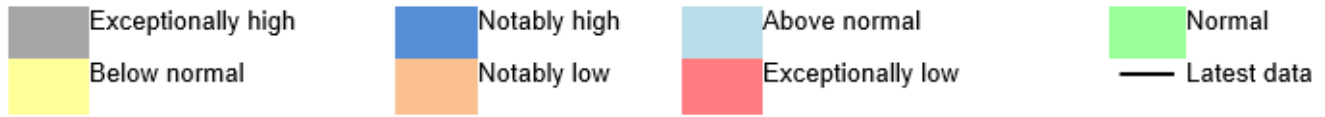
5.1: Groundwater levels for indicator sites at the end of April 2026, classed relative to an analysis of respective historic April levels. Groundwater levels were classed as notably high at Aycliffe, above normal at Royalty Observation, West Hall Farm and Red Lion and below normal at Town Law for the time of 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

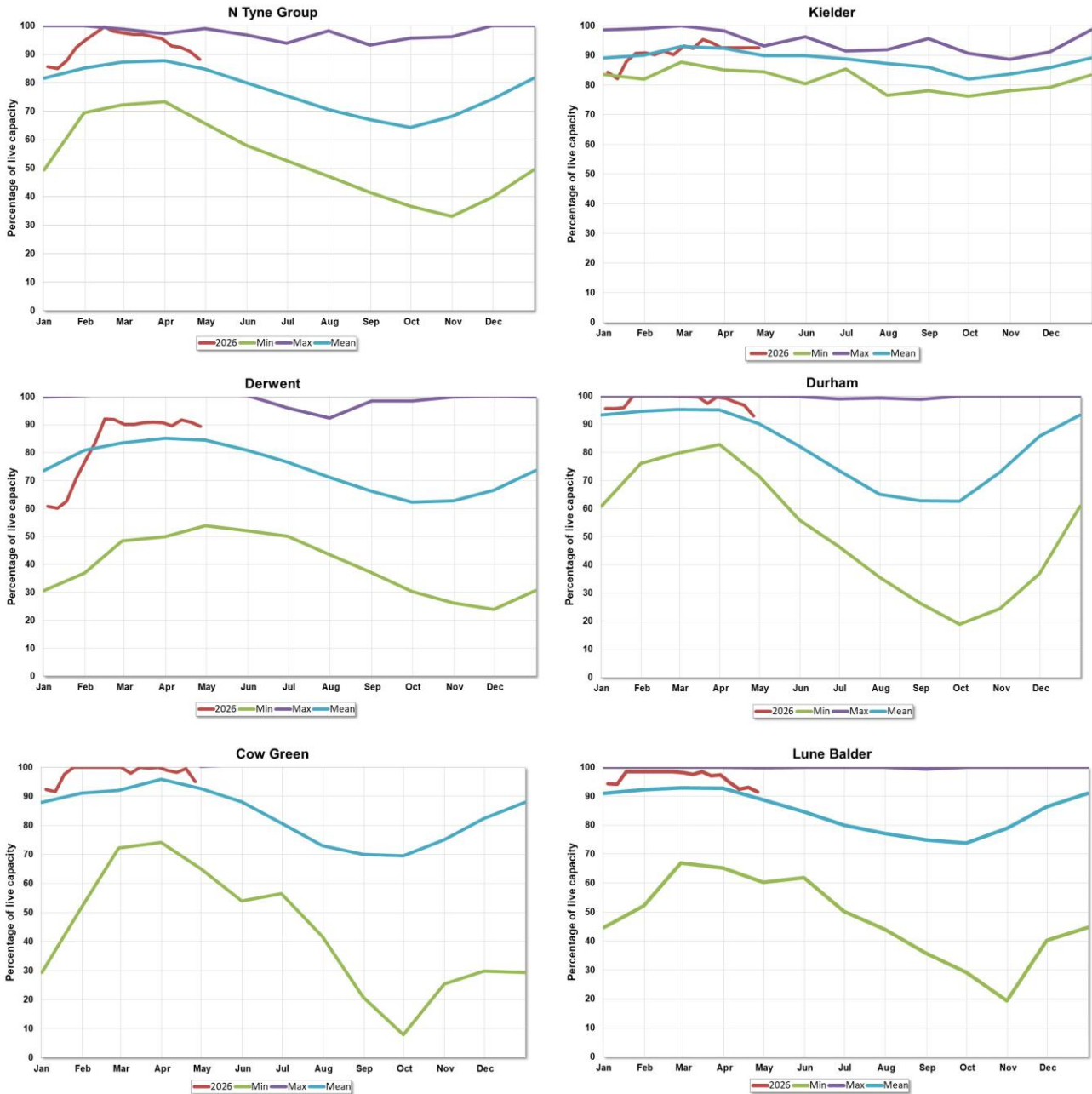
5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.



(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	Apr 2026 rainfall % of long term average 1991 to 2020	Apr 2026 band	Feb 2026 to April cumulative band	Nov 2025 to April cumulative band	May 2025 to April cumulative band
Northumbria North Sea Tribs	52	Below Normal	Normal	Notably high	Normal
Seaham Area	27	Notably Low	Normal	Above normal	Normal
Tees	46	Notably Low	Normal	Notably high	Normal
Tweed	59	Below Normal	Normal	Notably high	Normal
Tyne	64	Below Normal	Normal	Notably high	Above normal
Wear	43	Below Normal	Normal	Notably high	Normal

8.2 River flows table

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

8.3 Groundwater table

Site name	Aquifer	End of Apr 2026 band	End of Mar 2026 band
Aycliffe Nra2	Skerne Magnesian Limestone	Notably high	Notably high
Red Lion	Skerne Magnesian Limestone	Above normal	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