

Monthly water situation report: Yorkshire Area

1 Summary - June 2026

Rainfall totals in Yorkshire in June were normal for the time of year. Monthly mean flows declined for much of the month and were well below the long term average (LTA) in most rivers by month's end. Soils reacted to the rainfall pattern but became drier overall. Reservoir stocks decreased and were just below the LTA. Groundwater levels decreased in all aquifers. Hands of Flow (HoF) restrictions were put in place on abstractions in some river catchments.

1.1 Rainfall

Catchment average rainfall in June was normal with most catchments experiencing 55% to 97% of the LTA for the time of year. Although the Ure catchment also had normal June rainfall, at 105% it was slightly higher than the LTA. The April to June 3-month rainfall totals were normal in the north-west catchments of Yorkshire, below normal in most southern, central and north-eastern areas, and notably low in the Derwent and Hull catchments in the south-east.

Much of the month's rain fell in the first 11 days, and was concentrated on days 1, 3 and 7. One of our key indicator sites in the Wharfe recorded 44% of the LTA for the month on day 3 alone.

For the rest of the month there were very few wet days. Day 25 was notable in the Ouse, Esk and Rye catchments when a quarter to a third of the month's total rain fell in one day after gauges had recorded little to no rain for 13 days.

1.2 Soil moisture deficit and recharge

Soils began the month dry for the time of year in most areas except for the Pennines which were wet in the north and normal in the south. The Selby, Goole and lower Foulness area was very dry for the time of year. Soil moisture deficit (SMD) remained largely unchanged until the third week of the month.

By day 23, SMD had increased across the whole area in response to the significant increase in temperature. In the Pennines soils had become normal or dry for the time of year. For central and eastern Yorkshire soils ended the month very dry for the time of year.

1.3 River flows

Monthly mean flows in June were varied across Yorkshire, ranging from 23% of the LTA in the Esk to 170% of the LTA in the Wharfe. The southern and eastern catchments were below normal or notably low whereas the Pennine and Ouse catchments remained normal or above normal for the time of year.

In northern Pennine and Ouse catchments, daily mean flows began the month normal or slightly below normal for the time of year. In response to the rainfall most of their rivers peaked around day 4, with the Swale, Ure and Wharfe reaching exceptionally high flows for the time of year. They peaked again to lesser extent around days 9 and 11. Unlike other locations, the Ure also peaked on day 26 reaching notably high flows possibly in response to a localised thunderstorm.

In the River Calder, the lower catchment average rainfall caused flow to be less changeable. It remained normal for the majority of the month but briefly reached notably high flow on day 11.

In the Don and Rother catchments, flows mostly remained within the normal range. By day 13 they had declined sufficiently to reach below normal for the time of year. The Rother was notably low by day 18 and remained this way for the rest of the month.

The Rye followed a similar pattern to the Don and Rother. However, the recession in the Esk and Derwent in the latter half of the month was more substantial and flows reached exceptionally low for the time of year.

Flows in the spring fed West Beck declined steadily over the course of the month but remained below normal for the time of year throughout June.

1.4 Groundwater levels

Magnesian Limestone

The groundwater level within the Magnesian Limestone at Brick House Farm was normal for the time of year.

Millstone Grit

The groundwater level within the Millstone Grit at Hill Top Farm was notably low for the time of year.

Sherwood Sandstone

The groundwater level within the Sherwood Sandstone at Great Ouseburn was above normal for the time of year. The groundwater level at Riccall Approach Farm was normal for the time of year.

Corallian

The groundwater level within the Corallian at Sproxton was normal for the time of year.

Chalk

The groundwater level within the Chalk at Wetwang was below normal for the time of year. The groundwater level at Dalton Estate Well was normal for the time of year.

1.5 Reservoir stocks

Reservoir stocks continued to decline. At the end of June, stocks were at 78.8%, 1.3% less than the LTA for the time of year.

1.6 Environmental impact

In late June, there were 50 abstraction licences with a HoF condition in force, and another 91 abstraction licence holders had been given advance warning that flows were low. The number of HoFs in place continues to change in response to the low flow conditions.

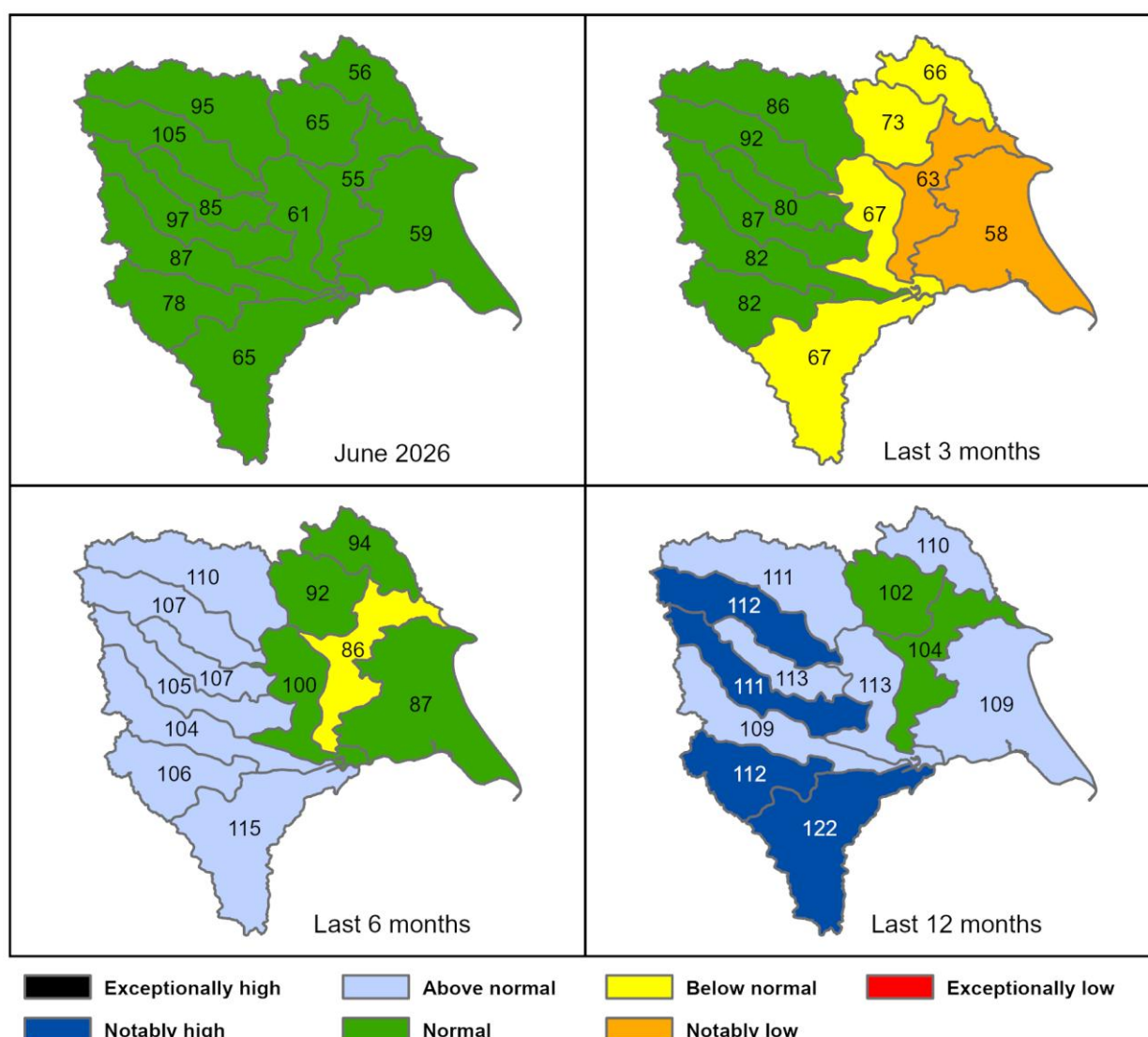
Author: Yorkshire Hydrology Team, hydrology.northeast@environment-agency.gov.uk

All data are provisional and may be subject to revision. The views expressed in this document are not necessarily those of the Environment Agency. Its officers, servants or agents accept no liability for any loss or damage arising from the interpretation or use of the information, or reliance upon views contained in this report.

2 Rainfall

2.1 Rainfall map

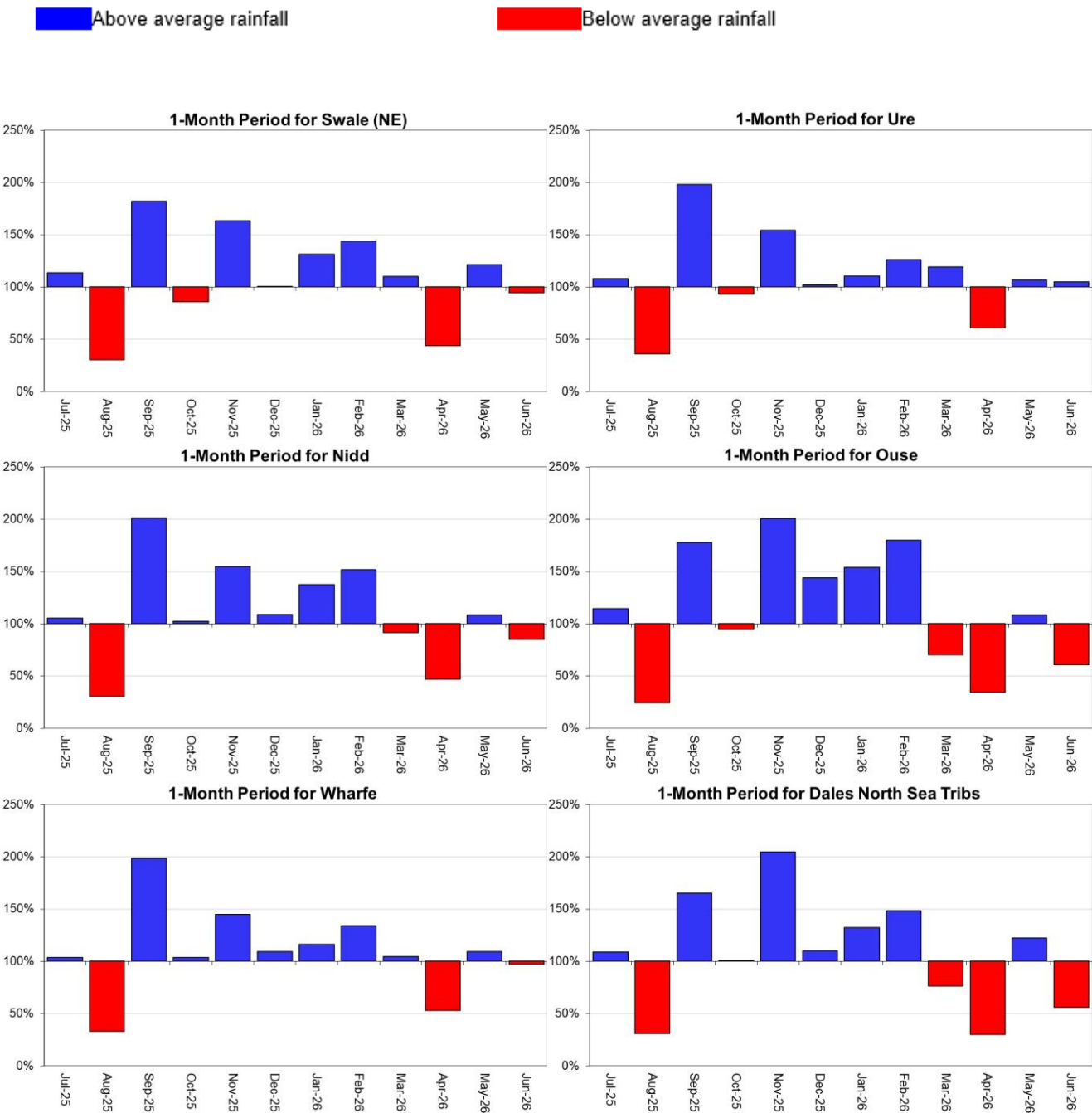
Figure 2.1: Total rainfall for hydrological areas across Yorkshire, expressed as a percentage of the 1991 to 2020 long term average rainfall, for the current month (up to 30 June 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the appendices with detailed information.

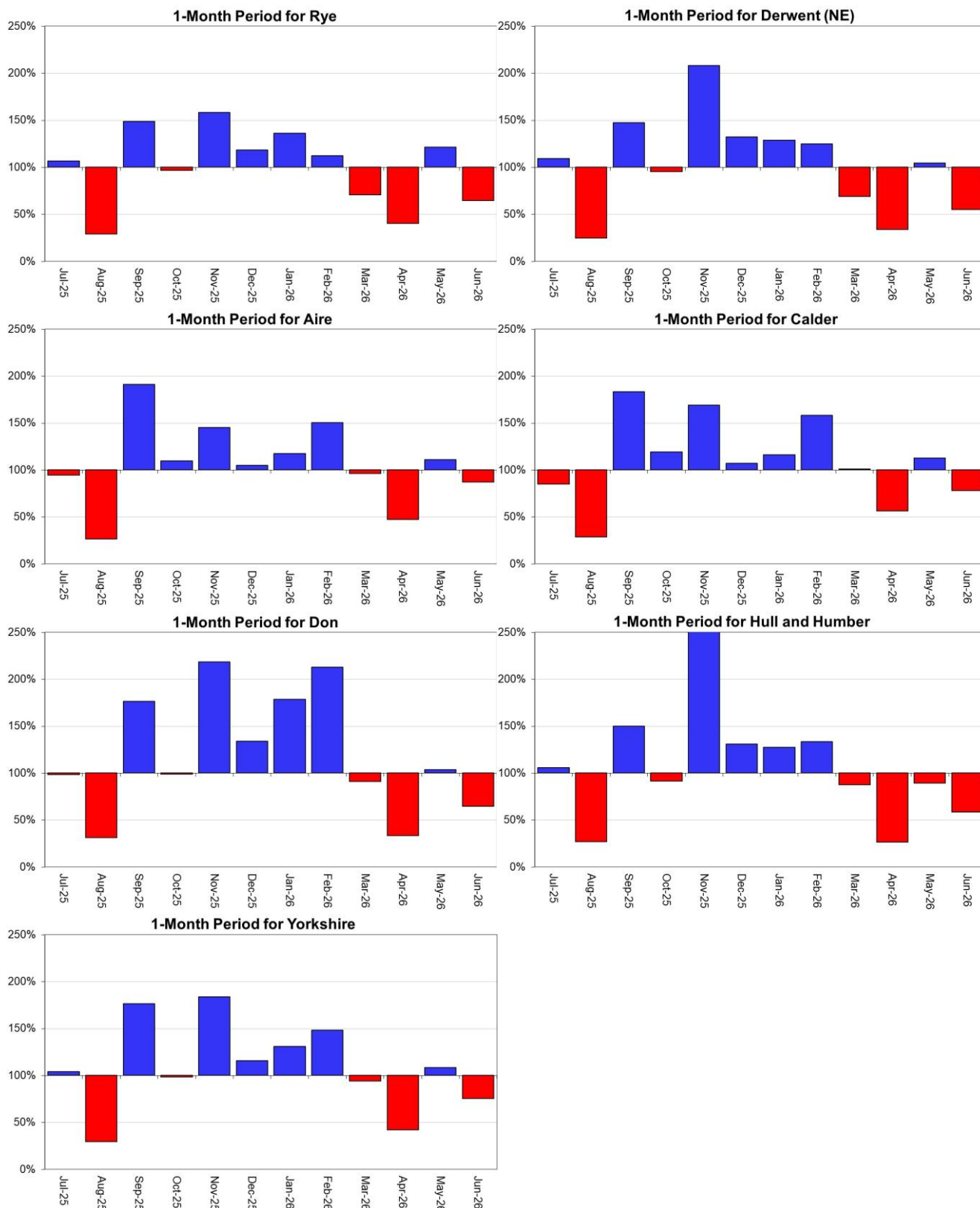


Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded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

2.2 Rainfall charts

Figure 2.2: Monthly rainfall totals for the past 12 months as a percentage of the 1991 to 2020 long term average for each catchment.





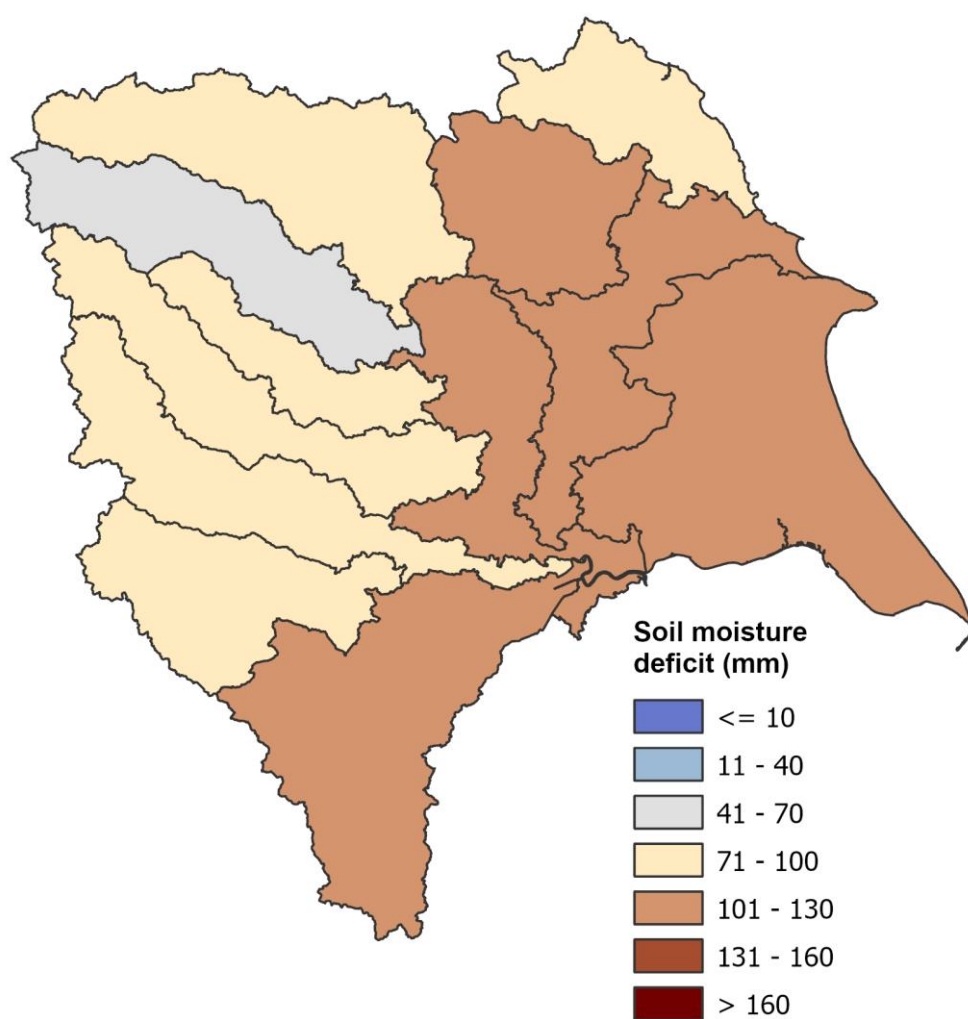
Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment

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

Figure 3.1: Soil moisture deficits for week ending 30 June 2026. Shows the actual soil moisture deficits (mm) within each hydrological area. Calculated from MORECS data for real land use.

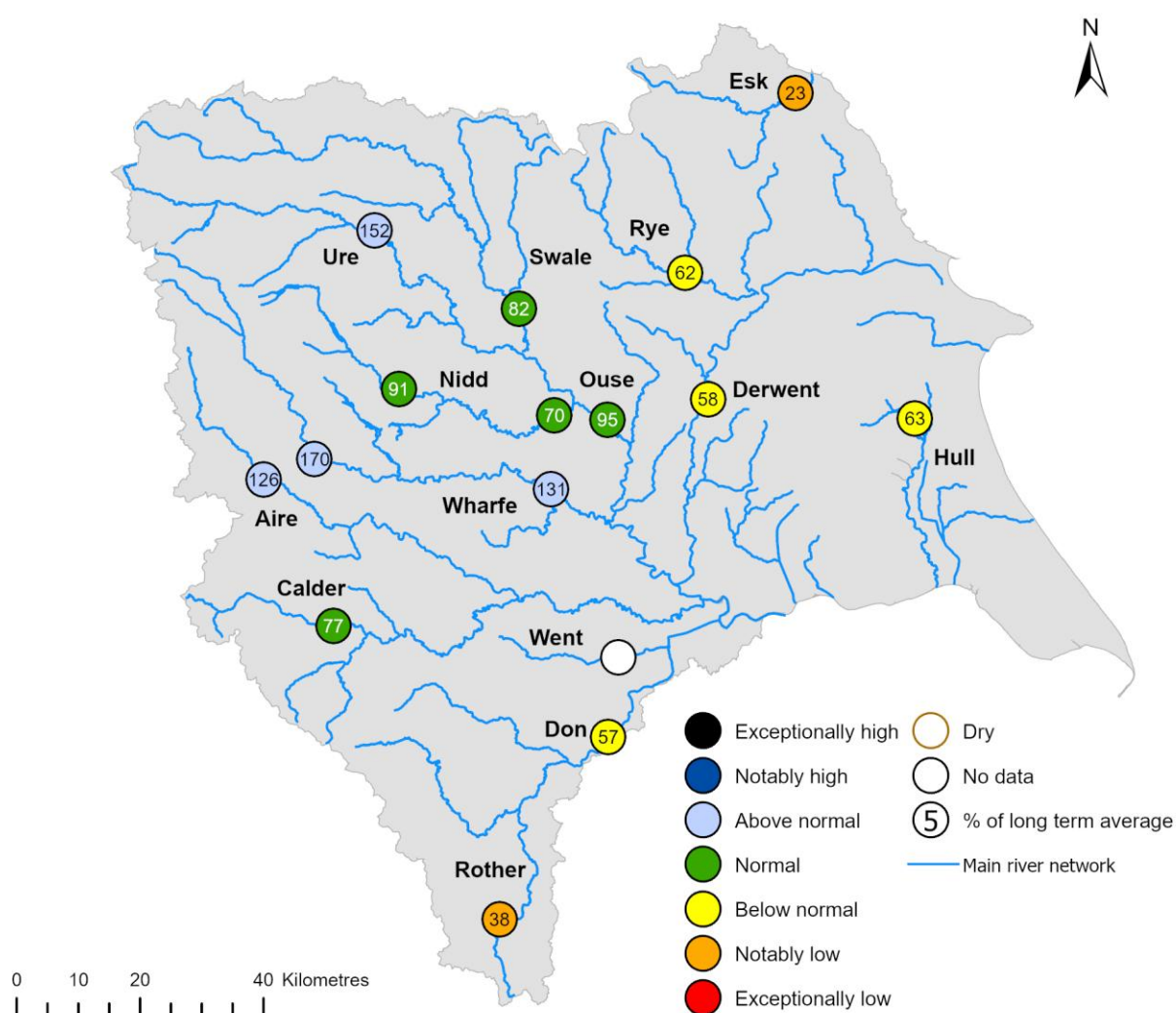


(Source: Met Office. Crown copyright, 2026). All rights reserved. Environment Agency, AC0000807064, 2026.

4 River flows

4.1 River flows map

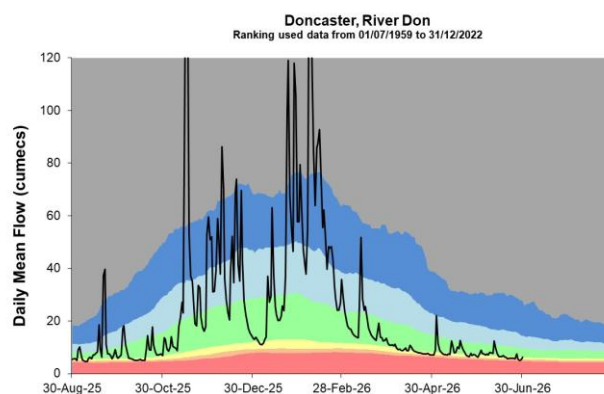
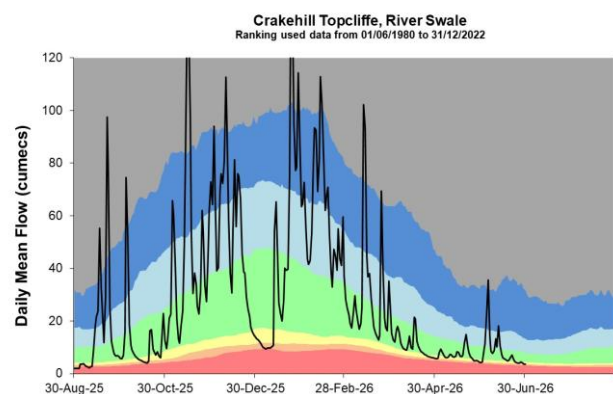
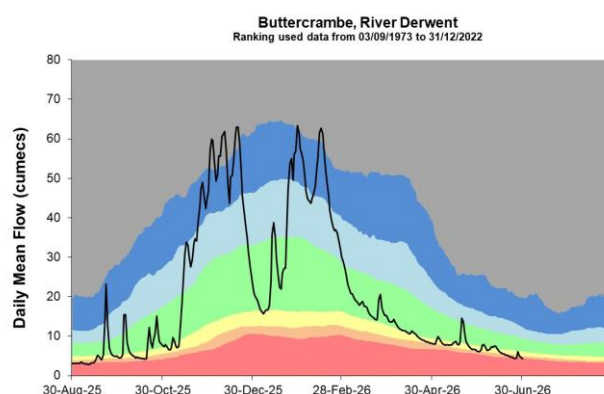
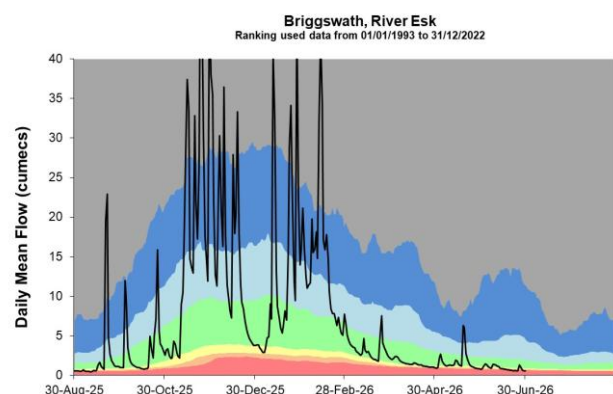
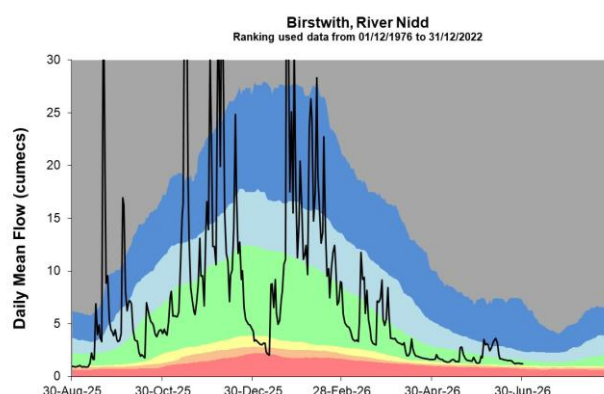
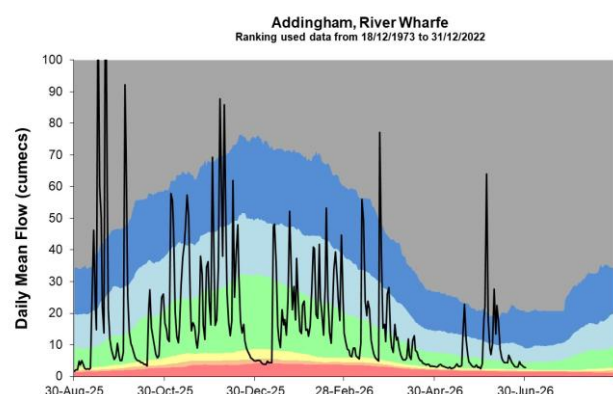
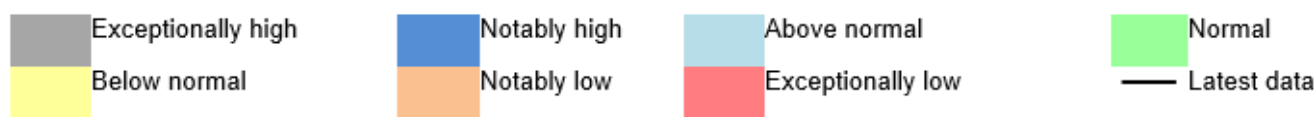
Figure 4.1: Monthly mean river flow for indicator sites for June 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic June monthly means. Table available in the appendices with detailed information.



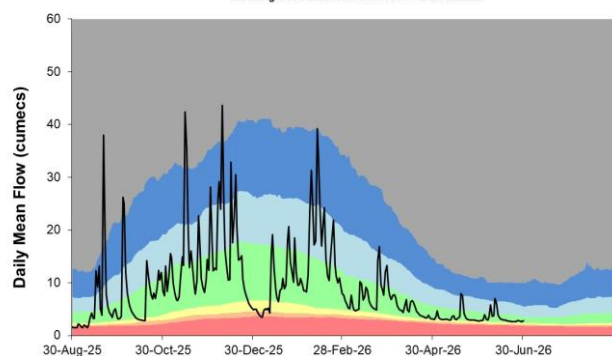
(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2026.

4.2 River flow charts

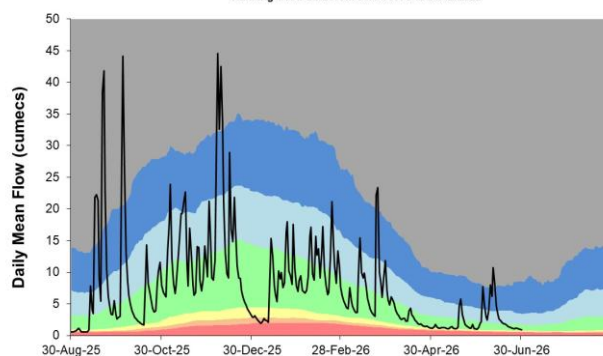
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



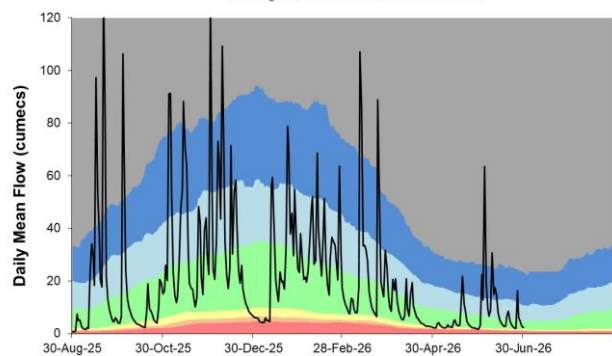
Elland, River Calder
Ranking used data from 01/07/1971 to 31/12/2022



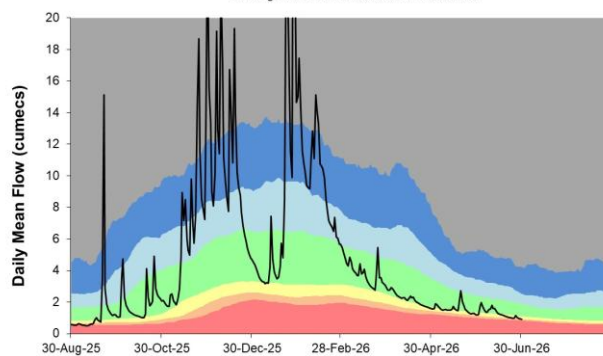
Kildwick, River Aire
Ranking used data from 01/01/1970 to 31/12/2022



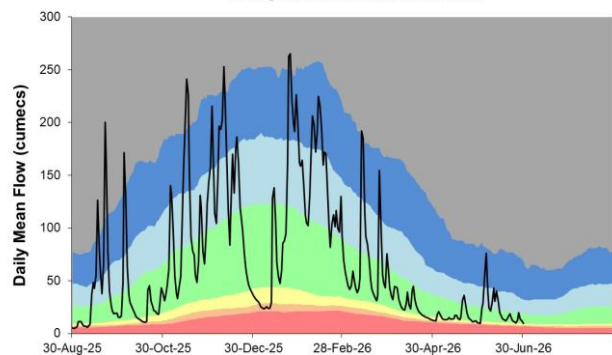
Kilgram Bridge, River Ure
Ranking used data from 01/01/1968 to 31/12/2022



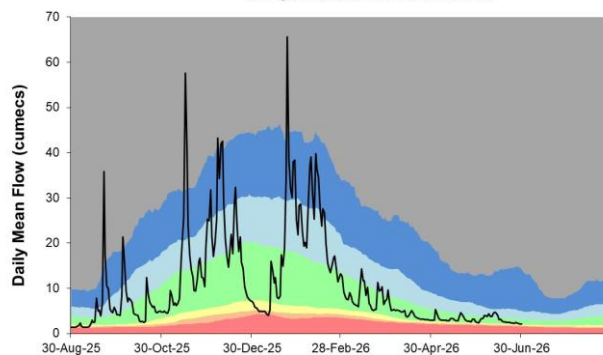
Ness, River Rye
Ranking used data from 07/08/1974 to 31/12/2022

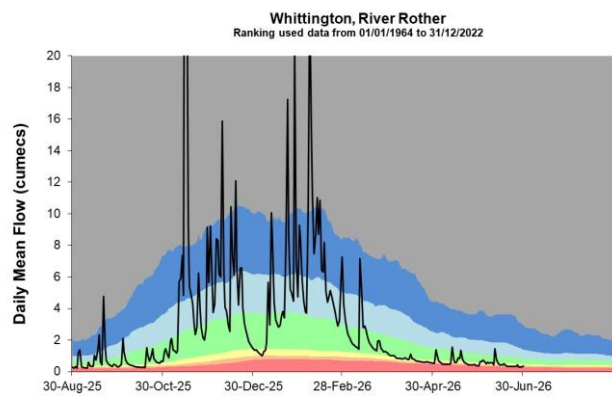
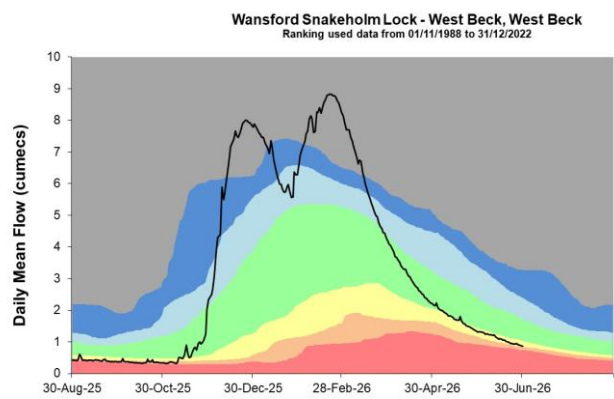
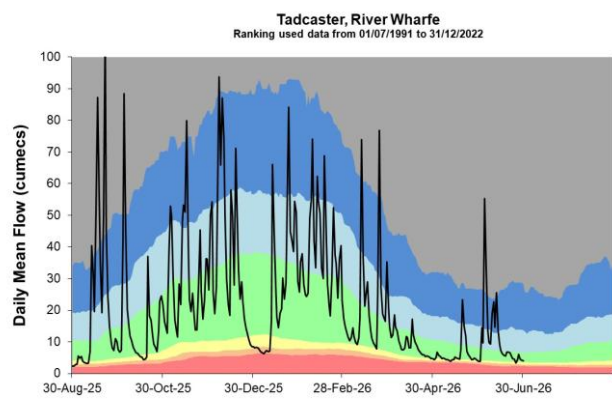


Skelton, River Ouse
Ranking used data from 18/09/1969 to 31/12/2022



Skip Bridge Kirk Hammerton, River Nidd
Ranking used data from 12/06/1979 to 31/12/2022



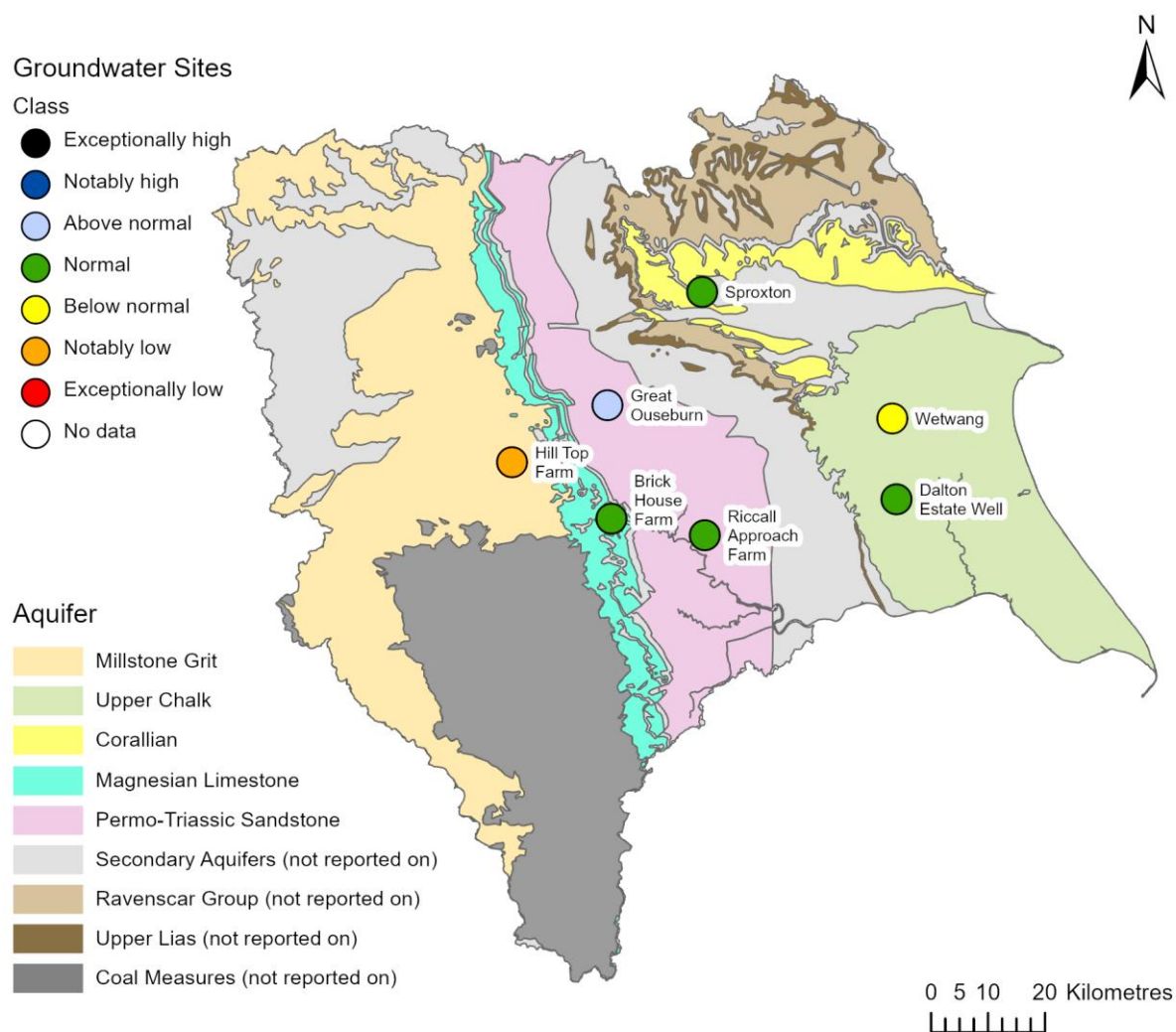


(Source: Environment Agency).

5 Groundwater levels

5.1 Groundwater levels map

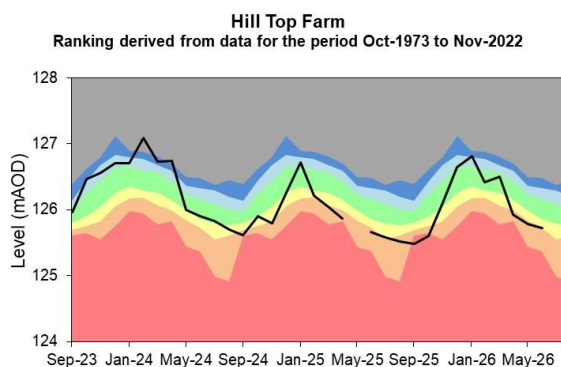
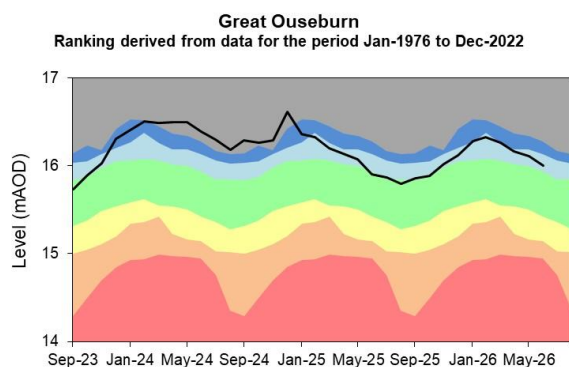
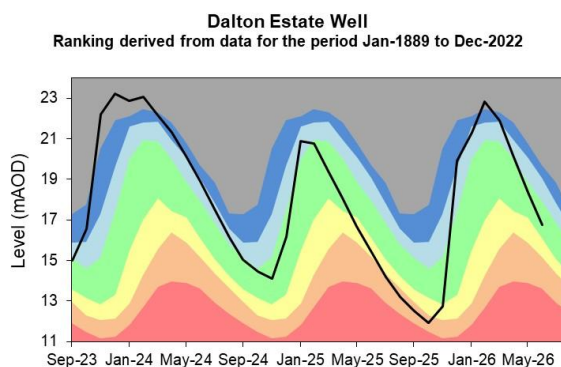
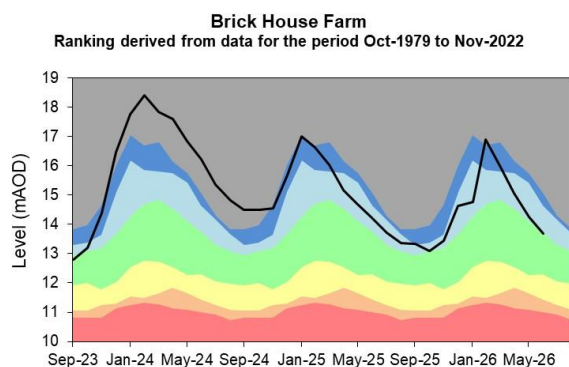
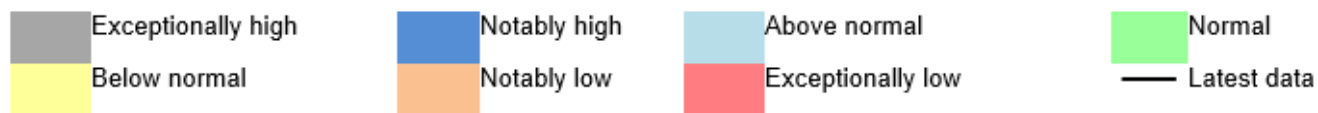
Figure 5.1: Groundwater levels for indicator sites at the end of June 2026, classed relative to an analysis of respective historic end of June levels. Table available in the appendices with detailed information. N.B. Hill Top Farm observation borehole is used for abstraction, therefore, the groundwater level record will be directly affected by pumping.

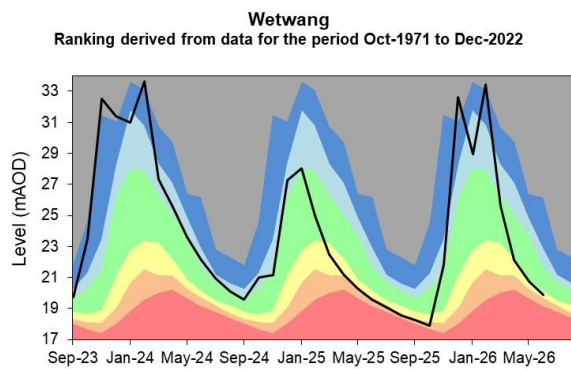
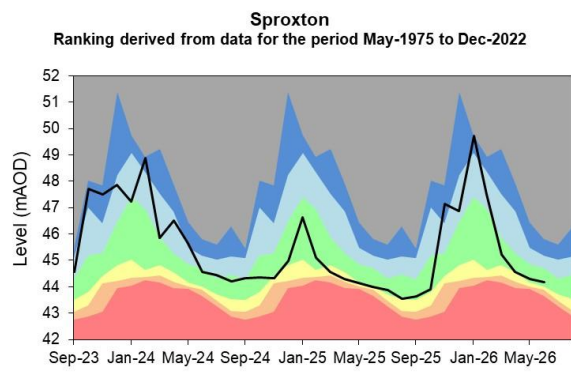
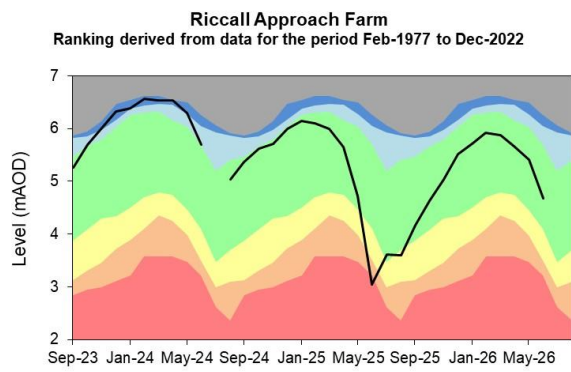


(Source: Environment Agency). Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2026.

5.2 Groundwater level charts

Figure 5.2: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels. N.B. Hill Top Farm observation borehole is used for abstraction, therefore, the groundwater level record will be directly affected by pumping.

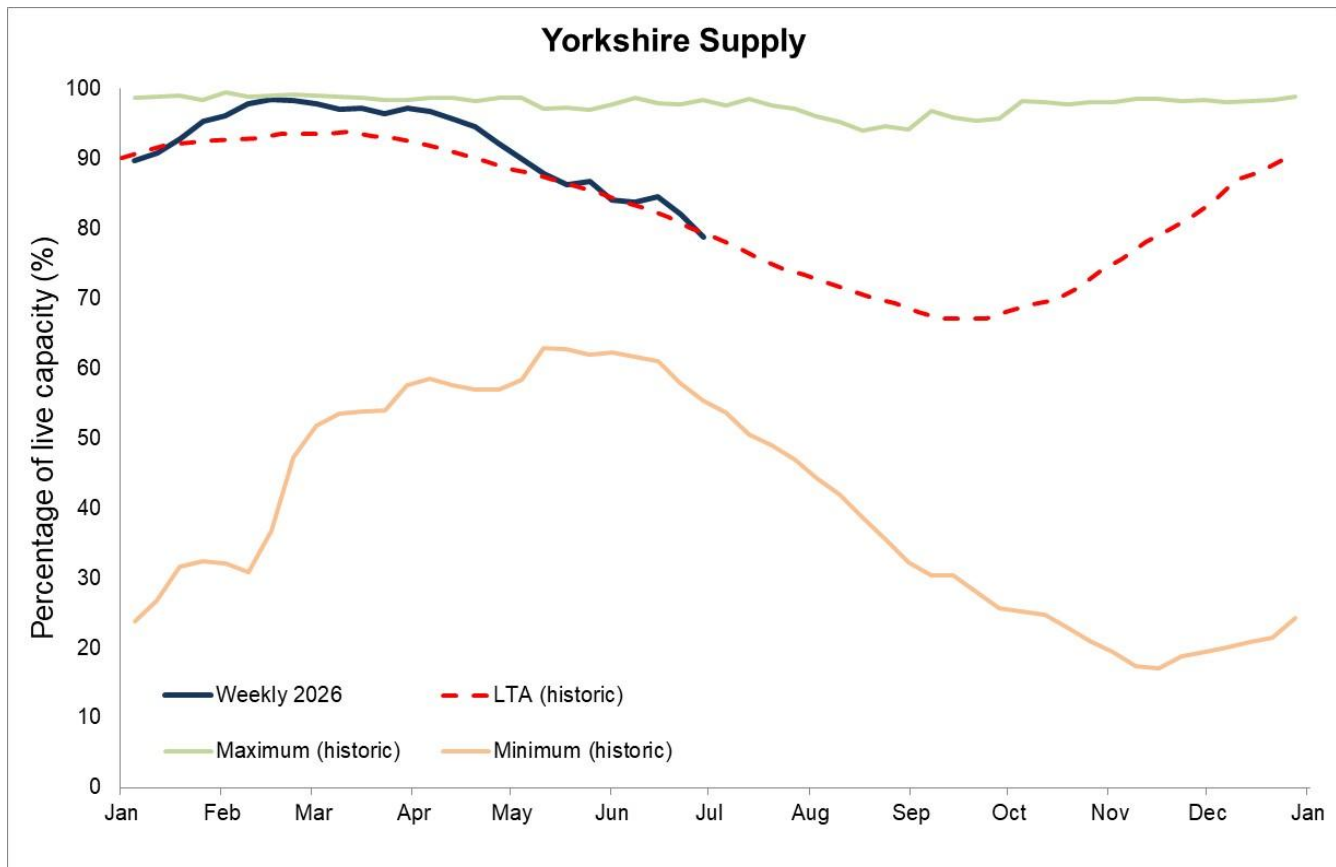




(Source: Environment Agency, 2026).

6 Reservoir stocks

Figure 6.1: End of month Yorkshire Water 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: Yorkshire Water).

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 1 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	Jun 2026 rainfall % of long term average 1991 to 2020	Jun 2026 band	Apr 2026 to June cumulative band	Jan 2026 to June cumulative band	Jul 2025 to June cumulative band
Aire	87	Normal	Normal	Above normal	Above normal
Calder	78	Normal	Normal	Above normal	Notably high
Dales North Sea Tributaries	56	Normal	Below normal	Normal	Above normal
Derwent (NE)	55	Normal	Notably low	Below normal	Normal
Don	65	Normal	Below normal	Above normal	Notably high
Hull And Humber	59	Normal	Notably low	Normal	Above normal
Nidd	85	Normal	Normal	Above normal	Above normal
Ouse	61	Normal	Below normal	Normal	Above normal
Rye	65	Normal	Below normal	Normal	Normal
Swale (NE)	95	Normal	Normal	Above normal	Above normal
Ure	105	Normal	Normal	Above normal	Notably high
Wharfe	97	Normal	Normal	Above normal	Notably high

8.2 River flows table

Site name	River	Catchment	Jun 2026 band	May 2026 band
Addingham	Wharfe	Wharfe Middle	Above normal	Normal
Birstwith	Nidd	Nidd Middle	Normal	Normal
Briggswath	Esk	Esk Yorks	Notably low	Normal
Buttercrambe	Derwent	Derwent Yorks Middle	Below normal	Below normal
Crakehill Topcliffe	Swale	Swale Lower	Normal	Normal
Doncaster	Don	Don Lower	Below normal	Normal
Elland	Calder	Calder Yorks Upper	Normal	Normal
Skip Bridge Kirk Hammerton	Nidd	Nidd Lower	Normal	Normal
Kildwick	Aire	Aire Upper	Above normal	Normal
Kilgram Bridge	Ure	Ure Middle	Above normal	Normal
Ness	Rye	Rye	Below normal	Below normal
Skelton	Ouse	Ouse Yorks	Normal	Below normal
Tadcaster	Wharfe	Wharfe Lower	Above normal	Below normal
Wansford Snakeholm Lock	West Beck	Hull Upper	Below normal	Below normal
Whittington	Rother	Rother Yorks	Notably low	Below normal

8.3 Groundwater table

Site name	Aquifer	End of Jun 2026 band	End of May 2026 band
Brick House Farm	Wharfe Magnesian Limestone	Normal	Above normal
Dalton Estate Well	Hull and East Riding Chalk	Normal	Normal
Great Ouseburn	Sherwood Sandstone	Above normal	Above normal
Hill Top Farm	Millstone Grit and Carboniferous Limestone	Notably low	Notably low
Riccall Approach Farm	Sherwood Sandstone	Normal	Normal
Sproxton	Sherwood Sandstone	Normal	Normal
Wetwang	Hull and East Riding Chalk	Below normal	Below normal