

# Monthly water situation report: Yorkshire Area

## 1 Summary - April 2026

Rainfall was below normal in most catchments this month. River flows reflected this fluctuating between normal to below normal but mostly decreasing overall. Soils were gradually becoming drier throughout the month. Groundwater levels have reduced. Reservoir stocks remained close to capacity, tracking the long term average.

### 1.1 Rainfall

For Yorkshire, as a whole, the April monthly mean total rainfall was notably low at less than half of the long term average (LTA). All catchments received less rainfall than the previous month.

Pennines catchments from the Swale to the Aire, as well as the Rye, had below normal rainfall that was 35 to 53% of the LTA. The Calder, Don, Esk and Derwent had notably low rainfall, 30 to 42% of the LTA. Only the Hull and Humber catchment reported normal monthly rainfall totals of 60% of the LTA.

Most of the rainfall occurred prior to day 18. Across Yorkshire wet periods were recorded on days 2 to 4, day 11 and days 14 to 15. It was then largely dry from day 18 until month end.

### 1.2 Soil moisture deficit and recharge

In April soils started the month as wet and gradually became drier as the month progressed. By week 3 soil moisture deficit had increased to the normal range, apart from in the most western parts of the Pennine catchments which were still classified as wet.

### 1.3 River flows

In the central and northern Pennine catchments and North Yorkshire Moors, April monthly mean flows were normal at between 33 to 74% of the LTA. Flows in the Don, Rother and Derwent were below normal, between 38 to 57% of the LTA. In the Hull flows were normal, but were 99% of the LTA.

In the Upper Pennine catchments flows began the month in normal range. In response to rainfall there were occasional periods where flows temporarily increased in the first 17 days of the month. From day 18 flows in these catchments continued to decline. By day 25 both the Swale and Ure had reduced to below normal range and the Wharfe and Aire had done so by day 29.

In eastern Yorkshire, flows in the Esk, Rye and Derwent started the month as normal. In the first 17 days flows were generally reducing but remained within the normal range. In the Derwent there were short periods where flow reduced to below normal on day 10 and days 13

to 14. Flows in these catchments continued to decline and remained in below normal range from day 24 until month end.

In the West Beck flows steadily receded throughout the month, whilst remaining within normal range for April.

In the south of Yorkshire flows in the Don and Rother catchments started the month within normal range and reduced to below normal range day 5. Between days 15 to 17 flows responded to rainfall returning to normal. By day 18 flows were consistently below normal and reduced to notably low for the last 2 days of the month.

## 1.4 Groundwater levels

### **Magnesian Limestone**

The groundwater level in the Magnesian Limestone decreased at Brick House Farm and was at above normal for the time of year.

### **Millstone Grit**

The groundwater level in the Millstone Grit decreased at Hill Top Farm and was notably low for the time of year. *It should be noted that this observation borehole is used for water abstraction by means of a pump. Therefore, the groundwater level recorded here may be subject to the effects of this.*

### **Sherwood Sandstone**

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

### **Corallian Limestone**

The groundwater level in the Corallian Limestone decreased at Sproxton and was normal for the time of year.

### **Chalk**

The groundwater level decreased at Wetwang and was below normal for the time of year. The groundwater level decreased at Dalton Estate Well and was above normal for the time of year.

## 1.5 Reservoir stocks

Reservoir stocks continued to remain close to full capacity with only small weekly variations of less than 1% across the 4 weeks. Reservoir stocks remain close to the LTA for April.

## 1.6 Environmental impact

At the end of the month there was a single abstraction licence with a hands-off flow condition in force and another 22 licence holders have been given advanced warnings that flows were low.

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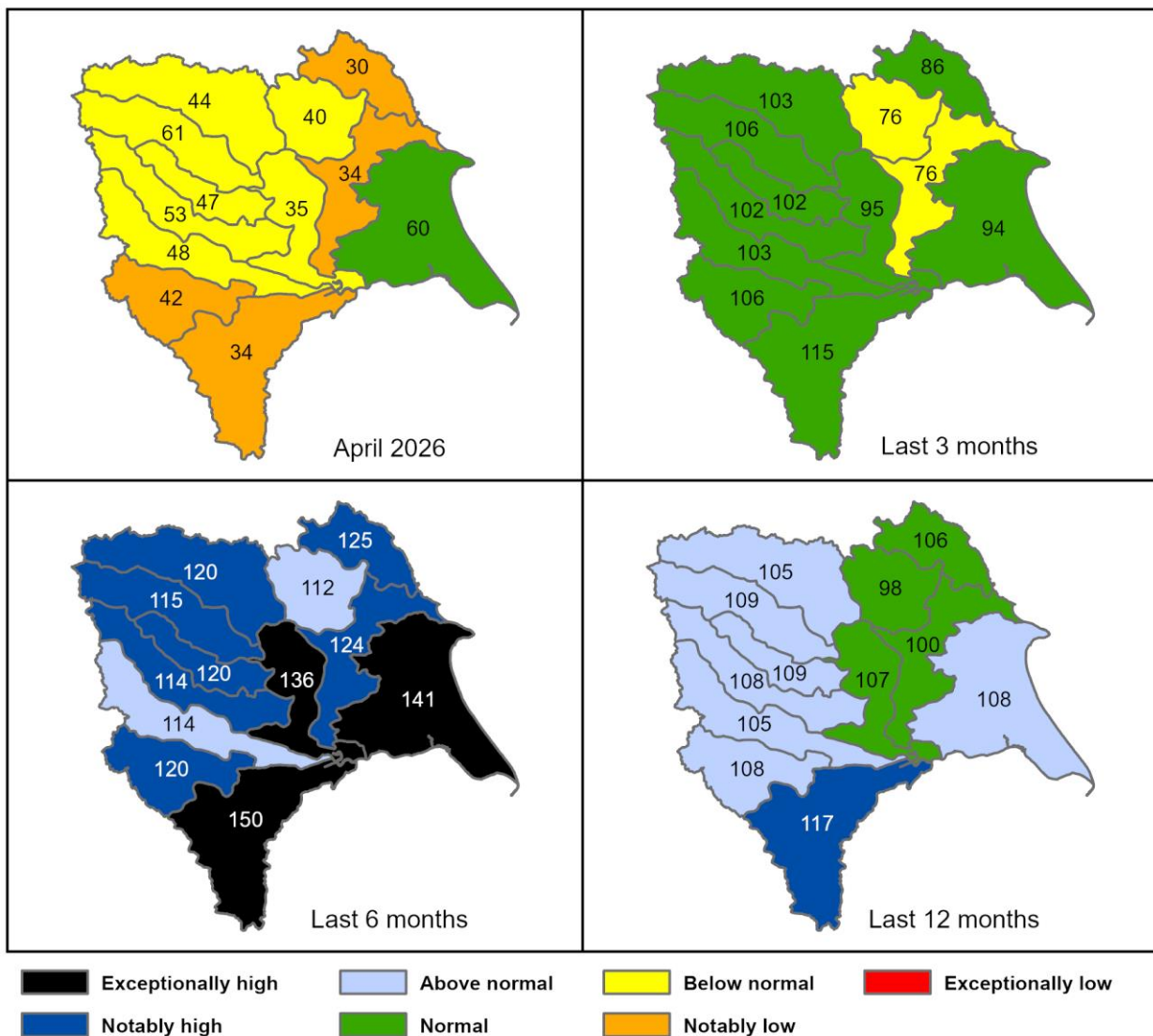
Contact Details: 020 847 48174

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## 2 Rainfall

### 2.1 Rainfall map

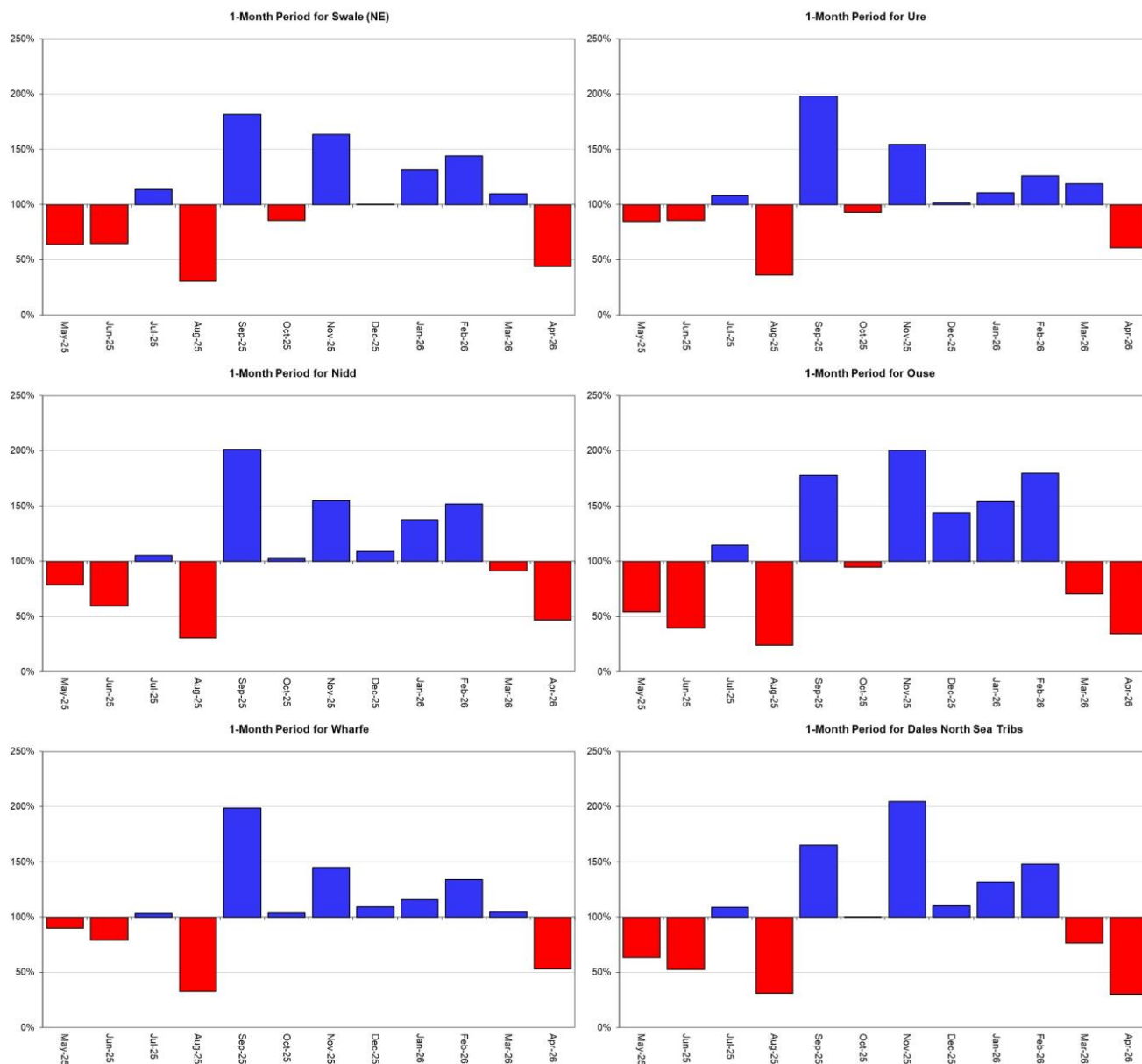
Figure 2.1: Total rainfall for hydrological areas across Yorkshire, expressed as a percentage of the 1991 to 2020 long term average rainfall, for the current month (up to 30 April 2026), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic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

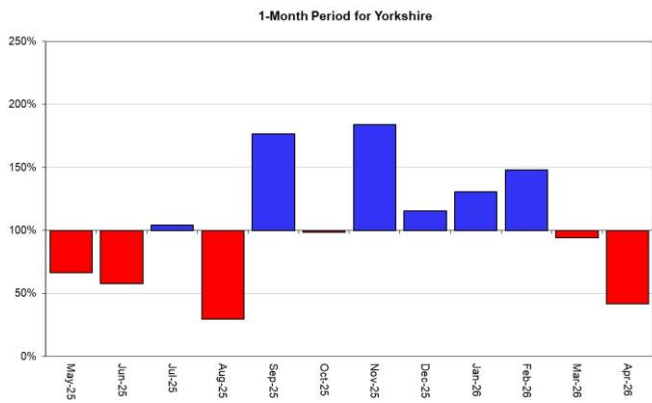
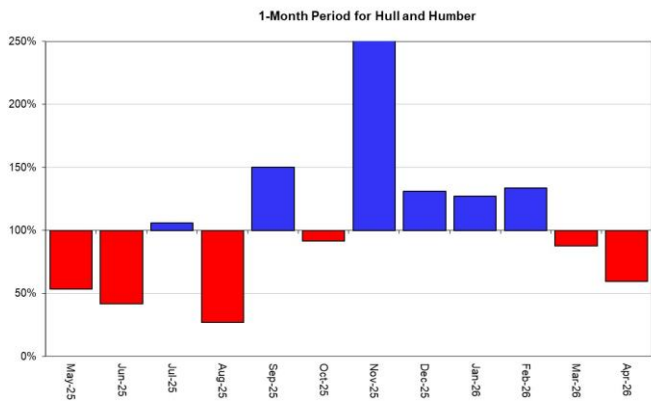
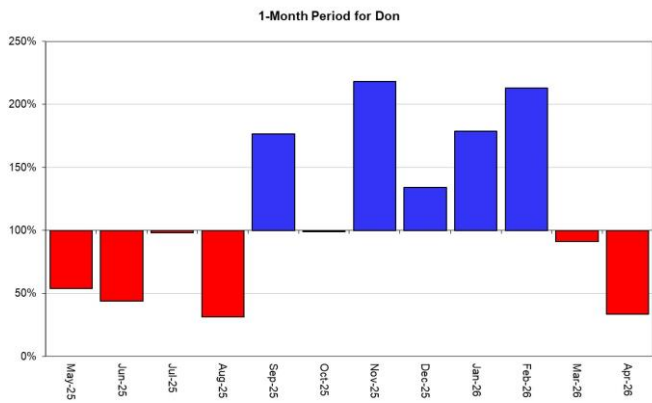
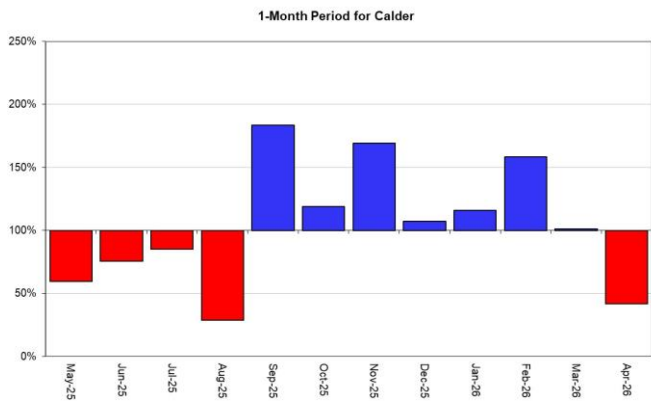
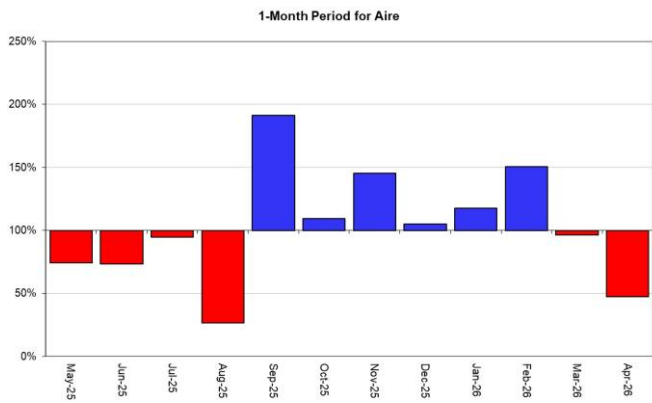
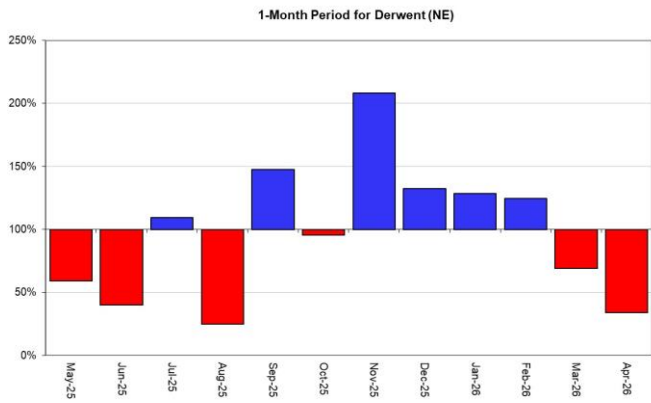
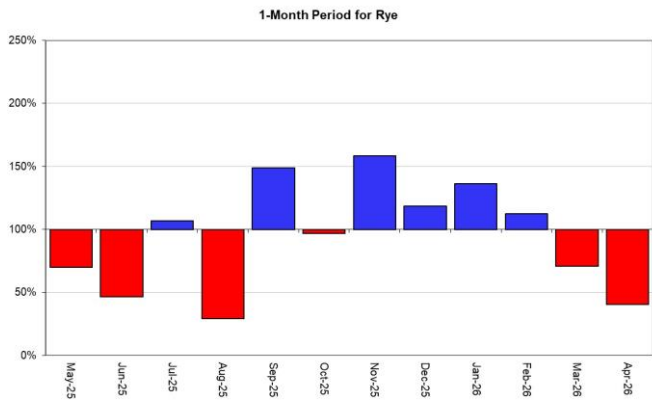


Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, AC0000807064, 2026). Rainfall data prior to January 2025, extracted from Met Office HadUK 1km gridded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





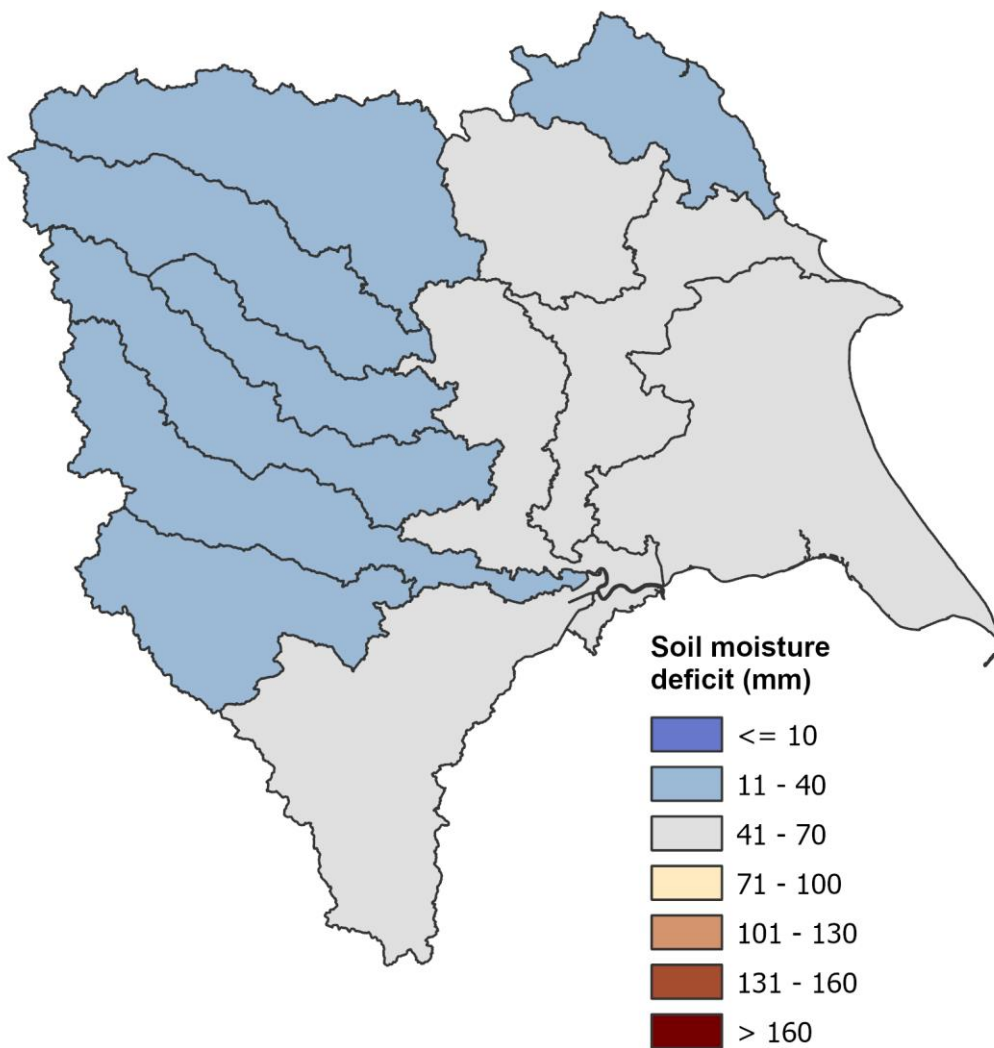
Rainfall data for January 2025 onwards, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment

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 weeks ending 30 April 2026. Shows the actual soil moisture deficits (mm) within each hydrological area. Calculated from MORECS data for real land use.

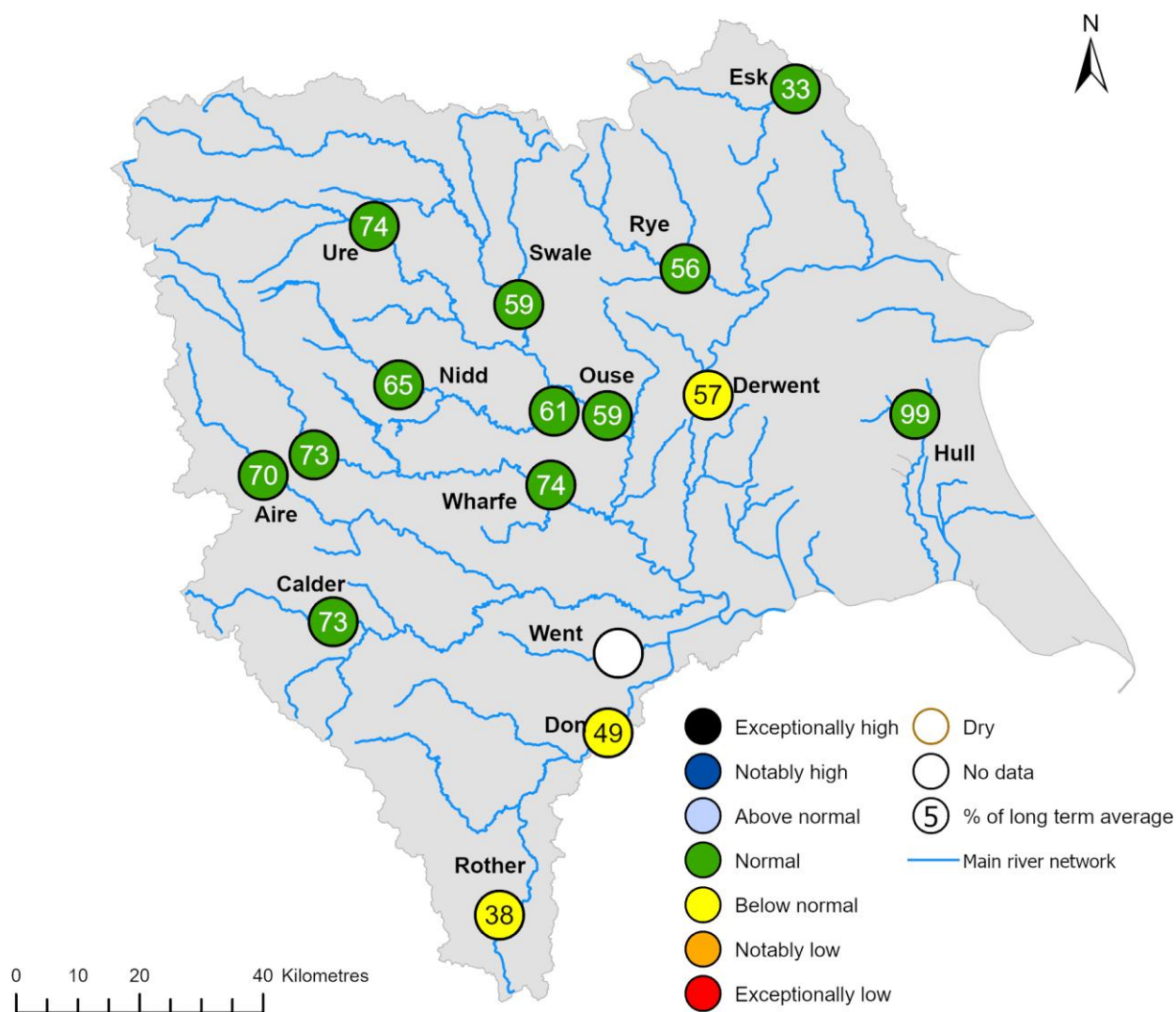


(Source: Met Office. Crown copyright, 2026). All rights reserved. Environment Agency, AC0000807064, 2026.

## 4 River flows

### 4.1 River flows map

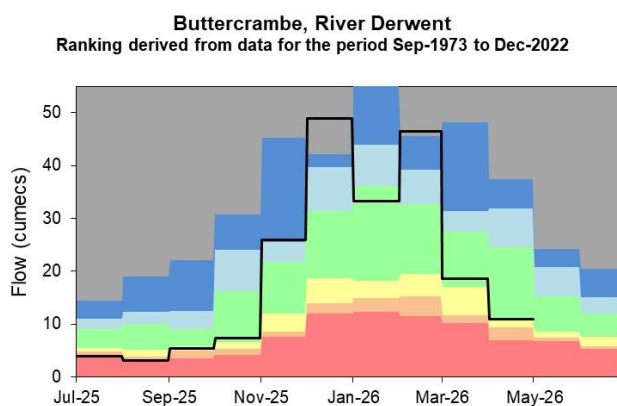
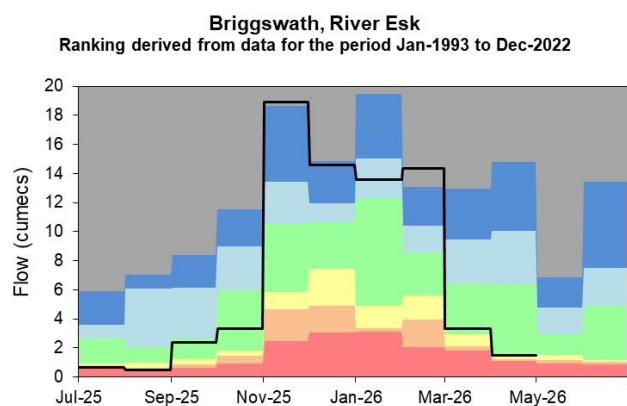
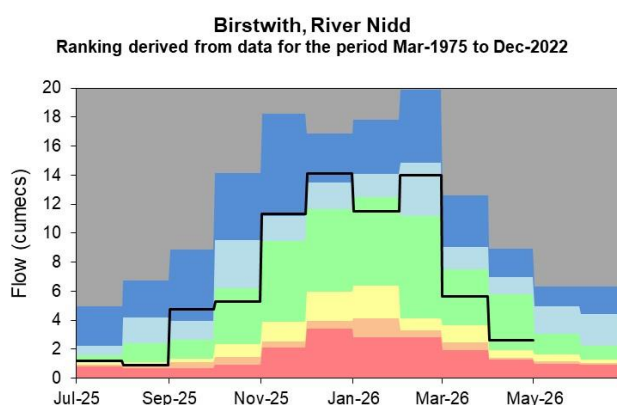
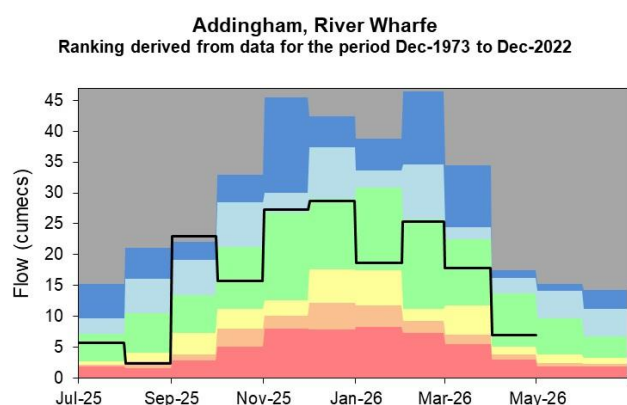
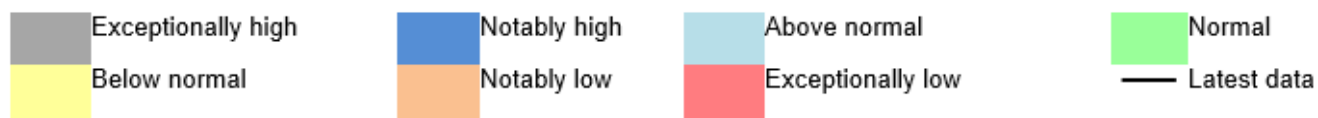
Figure 4.1: Monthly mean river flow for indicator sites for April 2026, expressed as a percentage of the respective long term average and classed relative to an analysis of historic April monthly means. Table available in the appendices with detailed information.



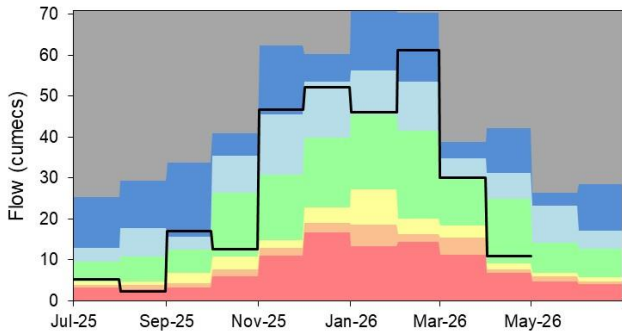
(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, AC0000807064, 2026.

## 4.2 River flow charts

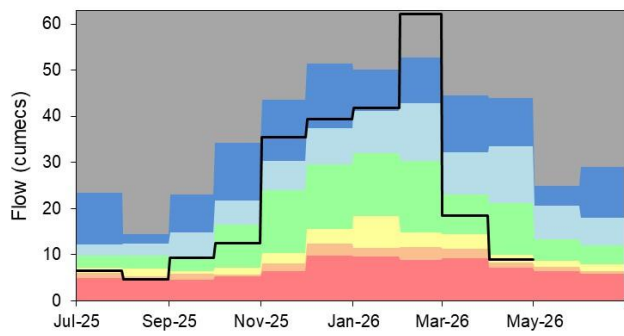
Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



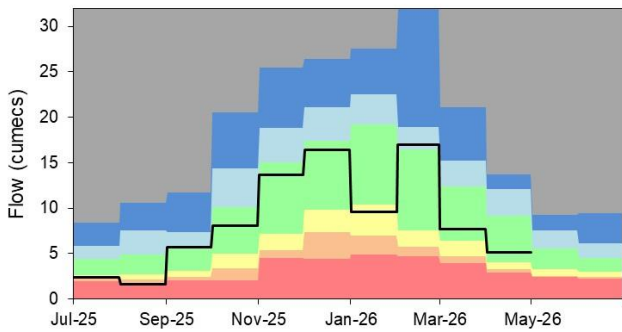
**Crakehill Topcliffe, River Swale**  
Ranking derived from data for the period Jun-1980 to Dec-2022



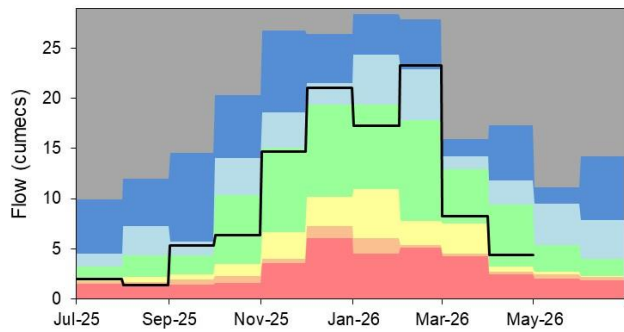
**Doncaster, River Don**  
Ranking derived from data for the period Jul-1959 to Dec-2022



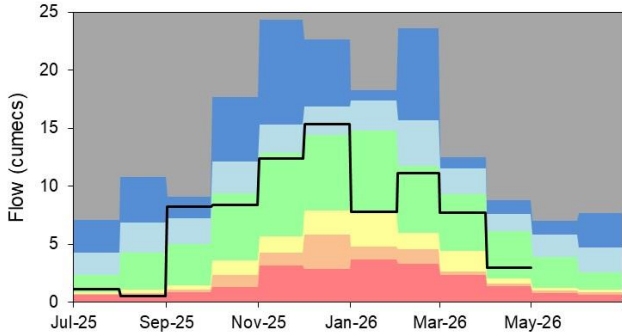
**Elland, River Calder**  
Ranking derived from data for the period Jul-1971 to Dec-2022



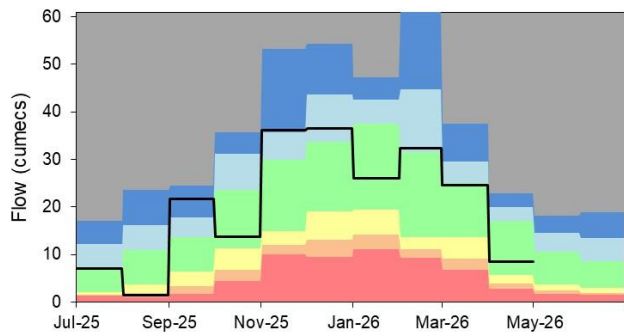
**Skip Bridge Kirk Hammerton,**  
Ranking derived from data for the period Jun-1979 to Dec-2022



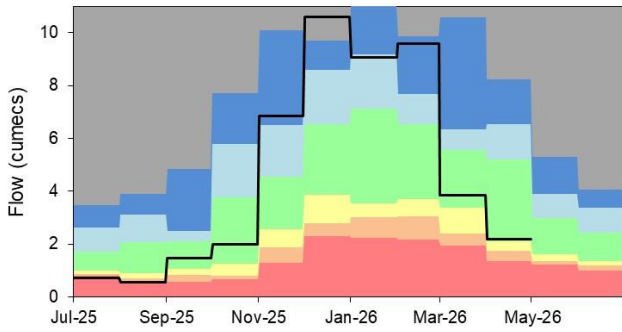
**Kildwick, River Aire**  
Ranking derived from data for the period Jan-1970 to Dec-2022



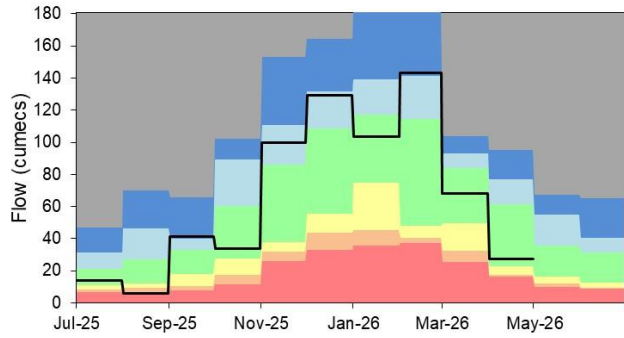
**Kilgram Bridge, River Ure**  
Ranking derived from data for the period Nov-1968 to Dec-2022



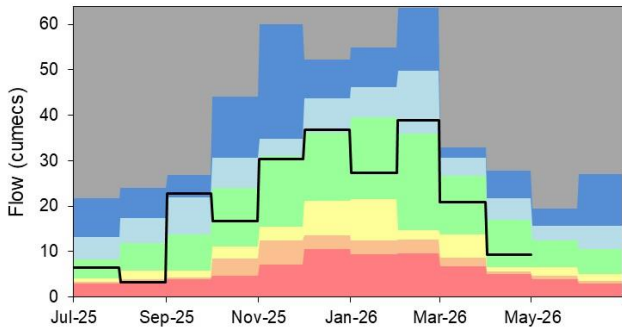
**Ness, River Rye**  
 Ranking derived from data for the period Aug-1974 to Dec-2022



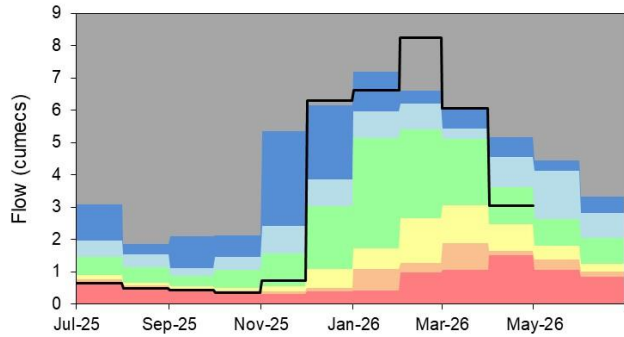
**Skelton, River Ouse**  
 Ranking derived from data for the period Sep-1969 to Dec-2022



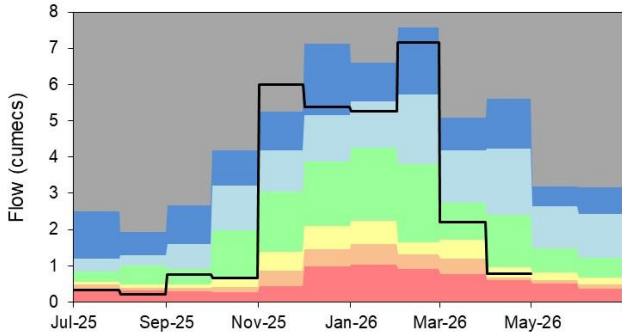
**Tadcaster, River Wharfe**  
 Ranking derived from data for the period Jul-1991 to Dec-2022



**Wansford Snakeholm Lock, West Beck**  
 Ranking derived from data for the period Nov-1988 to Dec-2022



**Whittington, River Rother**  
 Ranking derived from data for the period Jan-1964 to Dec-2022

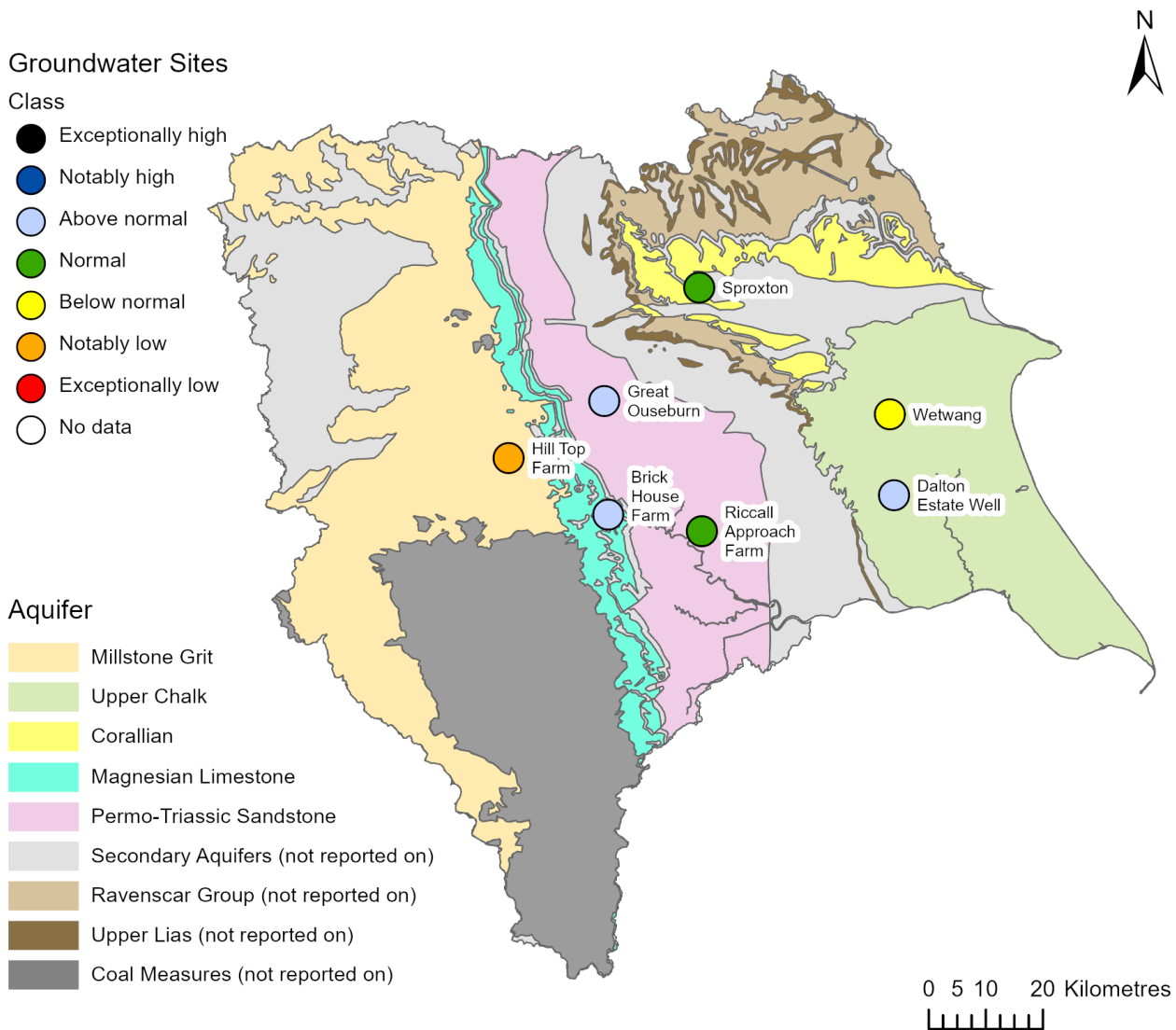


(Source: Environment Agency).

# 5 Groundwater levels

## 5.1 Groundwater levels map

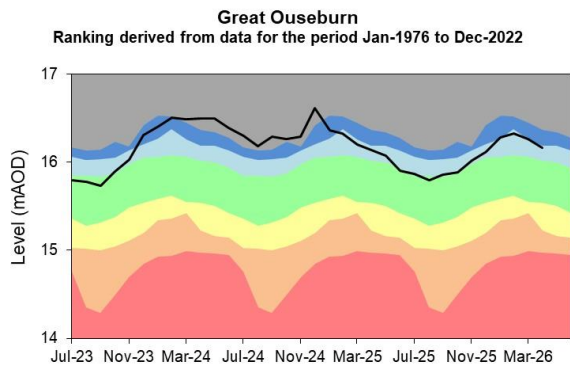
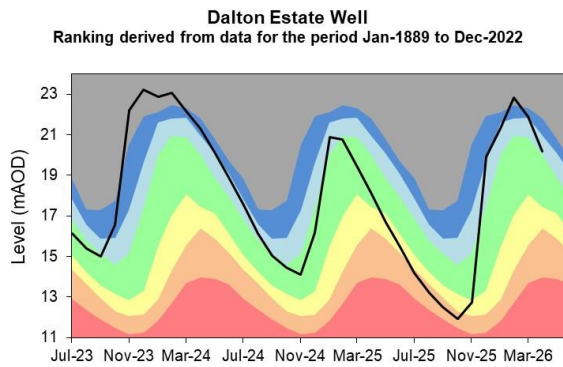
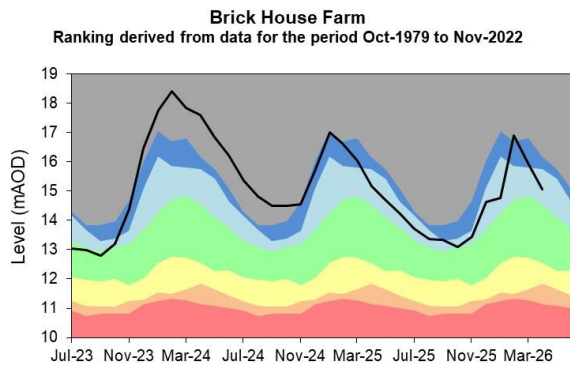
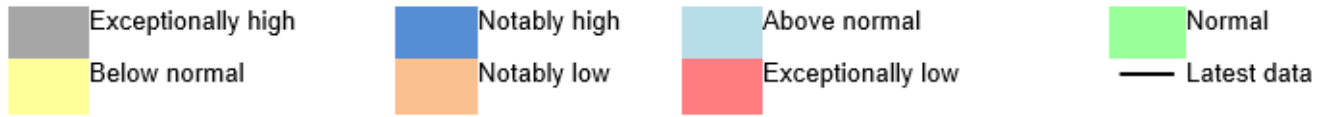
Figure 5.1: Groundwater levels for indicator sites at the end of April 2026, classed relative to an analysis of respective historic April levels. Table available in the appendices with detailed information.



(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

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.

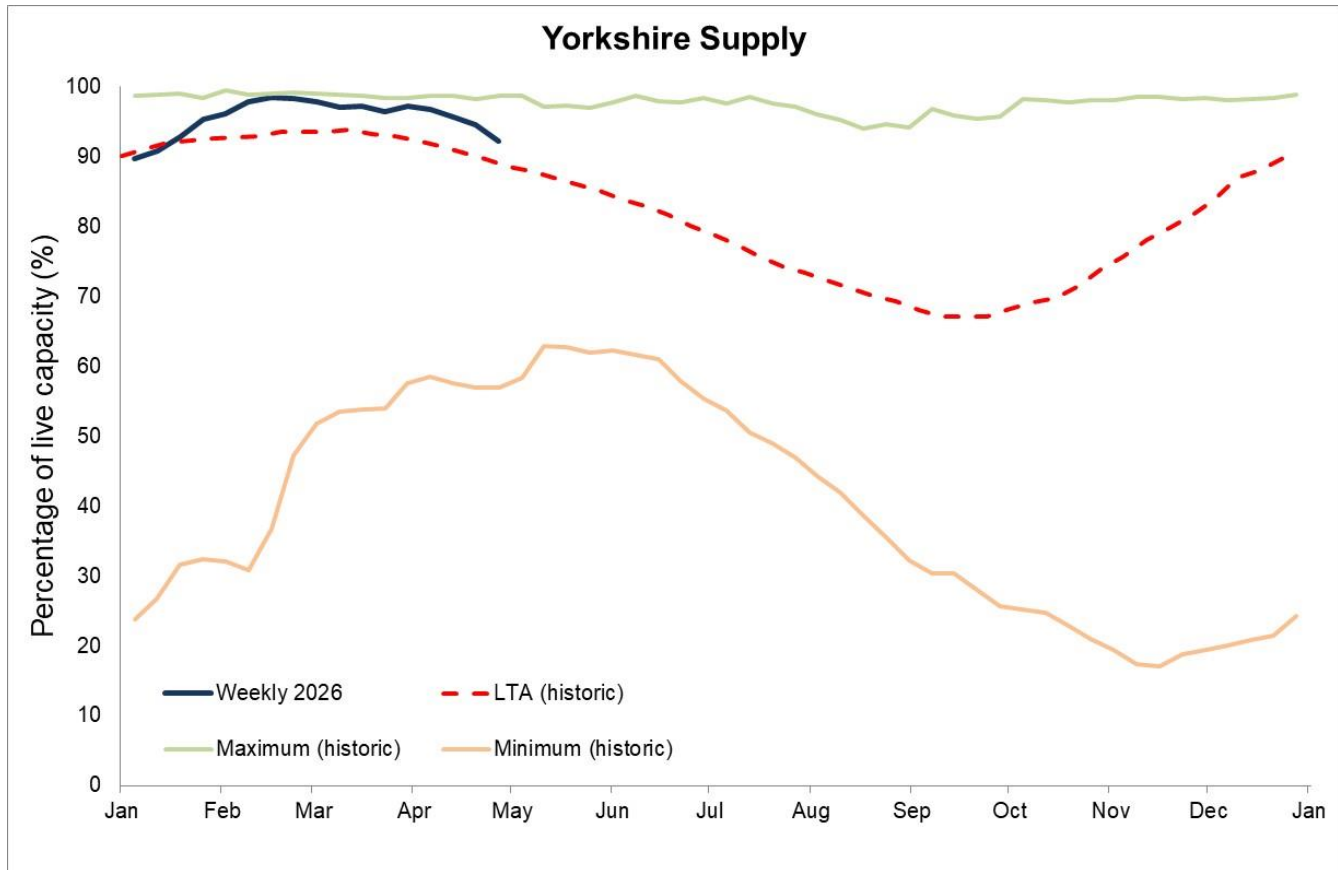


(Source: Environment Agency, 2026).

N.B. Hill Top Farm observation borehole is used for abstraction, therefore, the groundwater level record will be directly affected by pumping.

## 6 Reservoir stocks

Figure 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: 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 ( $\text{m}^3\text{s}^{-1}$ ).

#### **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
Aire	48	Below normal	Normal	Above normal	Above normal
Calder	42	Notably low	Normal	Notably high	Above normal
Dales North Sea Tributaries	30	Notably low	Normal	Notably high	Normal
Derwent (NE)	34	Notably low	Below normal	Notably high	Normal
Don	34	Notably low	Normal	Exceptionally high	Notably high
Hull and Humber	60	Normal	Normal	Exceptionally high	Above normal
Nidd	47	Below normal	Normal	Notably high	Above normal
Ouse	35	Below normal	Normal	Exceptionally high	Normal
Rye	40	Below normal	Below normal	Above normal	Normal

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
Swale (NE)	44	Below normal	Normal	Notably high	Above normal
Ure	61	Below normal	Normal	Notably high	Above normal
Wharfe	53	Below normal	Normal	Notably high	Above normal

## 8.2 River flows table

Site name	River	Catchment	Apr 2026 band	Mar 2026 band
Addingham	Wharfe	Wharfe Middle	Normal	Normal
Birstwith	Nidd	Nidd Middle	Normal	Normal
Briggswath	Esk	Esk Yorks	Normal	Normal
Buttercrambe	Derwent	Derwent Yorks Middle	Below normal	Normal
Crakehill Topcliffe	Swale	Swale Lower	Normal	Normal
Doncaster	Don	Don Lower	Below normal	Normal
Elland	Calder	Calder Yorks Upper	Normal	Normal
Kildwick	Aire	Aire Upper	Normal	Normal
Kilgram Bridge	Ure	Ure Middle	Normal	Normal
Ness	Rye	Rye	Normal	Normal
Skelton	Ouse	Ouse Yorks	Normal	Normal
Tadcaster	Wharfe	Wharfe Lower	Normal	Normal
Wansford Snakeholm Lock	West Beck	Hull Upper	Normal	Exceptionally high

Site name	River	Catchment	Apr 2026 band	Mar 2026 band
Whittington	Rother	Rother Yorks	Below normal	Normal

### 8.3 Groundwater table

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