UK Hydrological Outlook

Delivered in partnership by: UK Centre for Ecology & Hydrology

Period: From October 2025

Issued on 09.10.2025 using data to the end of September 2025

SUMMARY High rainfall in central and northern England over September has helped river flows recover, and they are likely to be in the normal to above normal range over the next one and three months. Below normal flows in groundwater-dominated catchments in southern England and north-east Scotland are likely to persist as these areas still require significant additional rainfall to replenish subsurface water stores.

Rainfall:

September's rainfall was above average across much of the UK, especially in central and northern England, Wales and Northern Ireland. Many of these areas experienced more than 170% of their average rainfall. Much of this rainfall occurred in the first half of September. A few regions, including northern Scotland and East Anglia, received slightly below normal rainfall. The forecast (issued by the Met Office on 29.09.2025) indicates a slight signal for a warm and wet October, with a stronger signal for windy conditions. Over October-December, the forecast suggests that the next three months are likely to be mild but unlikely to be wet, with normal or below normal rainfall more probable.

River flows:

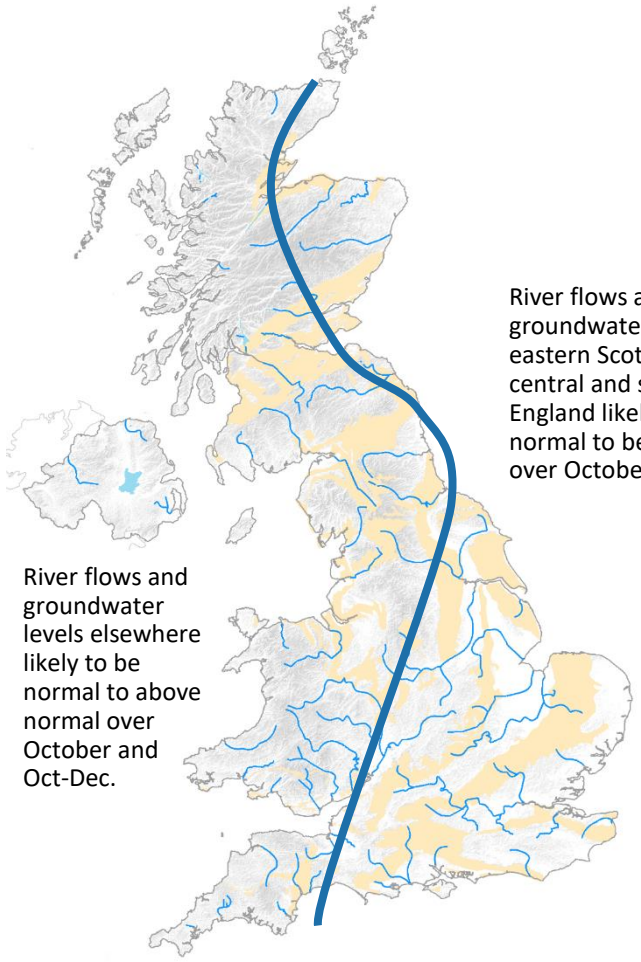
River flows in September in central and northern England have largely recovered from their summer lows, with exceptionally high flows seen in Cumbria. This follows from September's high rainfall in these regions. However, in groundwater-dominated areas of south-east England and in north-eastern Scotland flows remain notably low. New record lows were seen on the Deveron and Ythan in Aberdeenshire, with SEPA noting that water scarcity in this area remains significant.

The outlook for October is that these patterns will largely continue, with flows in northern and western England, western Scotland and Northern Ireland likely to remain in the normal to above normal range. Groundwater-fed rivers in southern and eastern England are likely to have normal to below normal flows as the deeper aquifers will take longer to recharge. Current deficits in eastern Scotland are also likely to persist. Over the October-December period, England's rivers are likely to be normal to below normal, while in Scotland most rivers are likely to recover and become normal to above normal. However, the below normal flows in eastern Scotland are likely to persist.

Groundwater:

Groundwater levels at the end of September remain low in many of the principal aquifers, especially those in southern and eastern England, Northern Ireland and central Scotland. Elsewhere groundwater levels are largely normal or above normal. The outlook indicates that groundwater levels are likely to remain below normal over October, but with the potential for recovery in most areas over the next three months.

The UK Hydrological Outlook provides an outlook for the water situation for the United Kingdom over the next three months and beyond. For guidance on how to interpret the outlook, a wider range of information, and a full description of underpinning methods, please visit the website: www.hydoutuk.net



Shaded areas show principal aquifers

UK HYDROLOGICAL OUTLOOK

October 2025

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About the UK Hydrological Outlook:

This document presents an outlook for the UK water situation for the next 1-3 months and beyond, using observational datasets, meteorological forecasts and a suite of hydrological modelling tools. The outlook is produced in a collaboration between the UK Centre for Ecology & Hydrology (UKCEH), British Geological Survey (BGS), the Met Office, the Environment Agency (EA), Natural Resources Wales (NRW), the Scottish Environment Protection Agency (SEPA), and for Northern Ireland, the Department for Infrastructure – Rivers (DfIR).

Data and Models:

The UK Hydrological Outlook depends on the active cooperation of many data suppliers. This cooperation is gratefully acknowledged. Historic river flow and groundwater data are sourced from the UK National River Flow Archive and the National Groundwater Level Archive. Contemporary data are provided by the EA, SEPA, NRW and DfIR. These data are used to initialise hydrological models, and to provide outlook information based on statistical analysis of historical analogues.

Climate forecasts are produced by the Met Office. Hydrological modelling is undertaken by UKCEH using the Grid-to-Grid and GR6J hydrological models. Hydrogeological modelling uses the AquiMod model run by BGS. Supporting documentation is available from the Outlooks website: https://hydoutuk.net/about/methods

Presentation:

The language used in the summary presented overleaf generally places flows and groundwater levels into just three classes, i.e. below normal, normal, and above normal. However, the underpinning methods use as many as seven classes as defined in the graphic to the right, i.e. the summary uses a simpler classification than some of the methods. On those occasions when it is appropriate to provide greater discrimination at the extremes the terminology and definitions of the seven class scheme will be adopted.

	Percentile range of historic values for relevant month
Exceptionally high flow	> 95
Notably high flow	87-95
Above normal	72-87
Normal range	28-72
Below normal	13-28
Notably low flow	5-13
Exceptionally low flow	< 5

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The UK Hydrological Outlook partnership aims to ensure that all Content provided is accurate and consistent with its current scientific understanding. However, the science which underlies hydrological and hydrogeological forecasts and climate projections is constantly evolving. Therefore any element of the Content which involves a forecast or a prediction should not be relied upon as though it were a statement of fact. To the fullest extent permitted by applicable law, the UK Hydrological Outlook Partnership excludes all warranties or representations (express or implied) in respect of the Content.

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Further information:

For more detailed information about the UK Hydrological Outlook, and the derivation of the maps, plots and interpretation provided in this outlook, please visit the UK Hydrological Outlook website. The website features a host of other background information, including a wider range of sources of information which are used in the preparation of this Outlook. Dynamic access to many of the outputs of the UK Hydrological Portal are available on the UK Hydrological Outlooks Portal.

Contact:

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Reference for the UK Hydrological Outlook:

UK Hydrological Outlook, 10 October 2025, UK Centre for Ecology & Hydrology, Oxfordshire UK, Online, https://www.hydoutuk.net/latest-outlook/

Other Sources of Information:

The UK Hydrological Outlook should be used alongside other sources of up-to-date information on the current water resources status and flood risk.

Environment Agency Water Situation Reports: provides summary of water resources status on a monthly and weekly basis for England: https://www.gov.uk/government/collections/water-situation-reports-for-england

Flood warnings are continually updated, and should be consulted for an up-to-date and localised assessment of flood risk:

i. Environment Agency: https://flood-warning-information.service.gov.uk/map
ii. Natural Resources Wales: https://flood-warning.naturalresources.wales/
iii. Scottish Environment Protection Agency: https://www.sepa.org.uk/flooding.aspx

Hydrological Summary for the UK: provides summary of current water resources status for the UK: https://nrfa.ceh.ac.uk/monthly-hydrological-summary-uk

UK Met Office forecasts for the UK: https://www.metoffice.gov.uk/

UK Water Resources Portal: monitor the UK hydrological situation in near real-time including rainfall, river flow, groundwater and soil moisture from COSMOS-UK: https://eip.ceh.ac.uk/hydrology/water-resources/

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