UK Hydrological Outlook

UKCEH

Period: From December 2025 Issued on 05.12.2025 using data to the end of November 2025

SUMMARY The outlook for December is for normal to above normal flows and groundwater levels across the majority of the UK, with the potential for exceptional highs in some catchments and aquifers. These levels are likely to return to normal over the winter season. River flows and groundwater levels across the chalk aquifers of the south-east, and in northern Scotland, are likely to be normal to below normal for the next three months.

Rainfall:

Rainfall in November was exceptionally high across much of the UK, with peak values at 170 percent of average across central and northern England and Wales. Below average rainfall occurred in the south-east and parts of Scotland. The forecast (issued by the Met Office on 01.12.2025) indicates a slight lean towards a wet December (1.3 times the normal chance), with the chances of a dry or wet season for the UK as a whole being close to normal. The chances of a cold season are lower than normal, but cold weather impacts are still possible at times.

River flows:

November river flows responded to the intense rainfall, resulting in recovery of flows across most of the UK to normal to above normal conditions. Below normal flows persist in some chalk fed catchments in the south-east, whilst flows across central and northern England and Wales rose to above normal to high, or even exceptionally high levels.

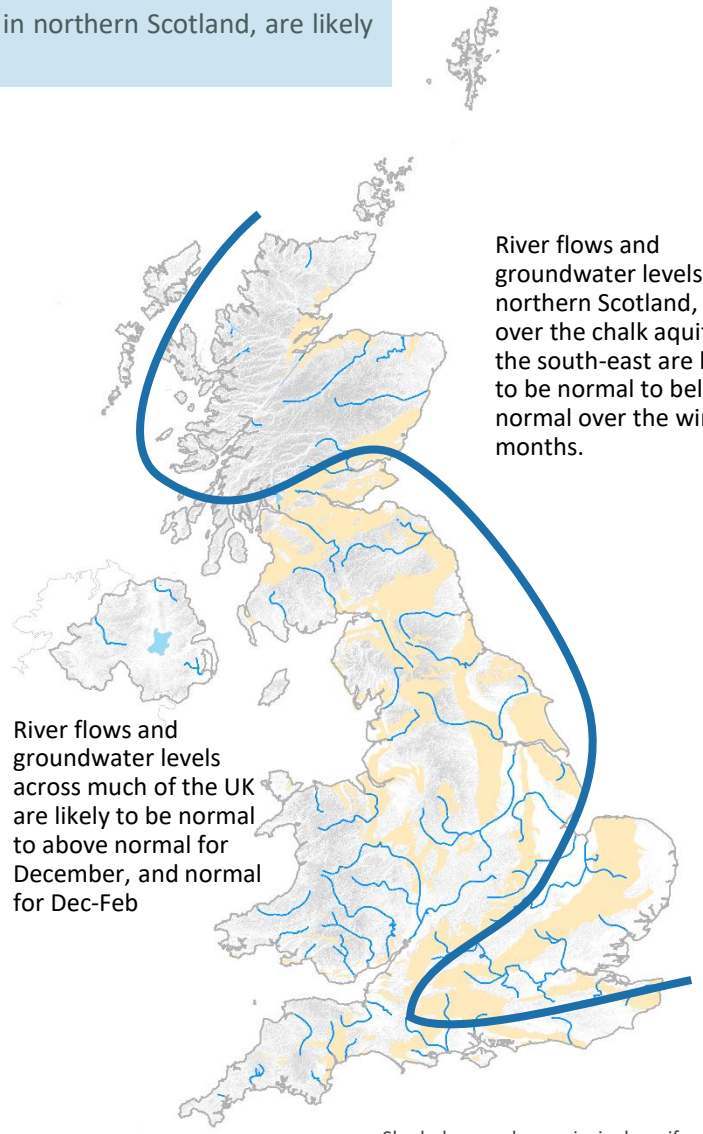
The outlook for December is for this pattern to broadly persist, with normal to below normal flows likely in parts of the south-east and Scotland, with normal to above normal flows being likely elsewhere. With continued wet conditions expected in December, flows in some catchments may be notably or exceptionally high in central and northern England and Wales. For December-January-February as a whole, normal river flows are expected across the majority of the UK, though localised below and above normal levels may persist through the winter.

Groundwater:

Groundwater levels followed a similar spatial pattern in November, though were more extreme in places. Levels in south-eastern England and northern Scotland were normal to exceptionally low, whilst levels across central and northern England, Wales and southern Scotland were normal to exceptionally high, with a few localised exceptions. Groundwater levels at Skirwith on the Permo-Triassic sandstone were the highest ever recorded for December.

The outlook for groundwater levels is also closely aligned with the rainfall pattern, with normal to notably low levels expected in the south-east for December, and normal to below normal levels over winter as a whole. Across the rest of the UK groundwater levels are expected to be normal to exceptionally high in December, and normal to above normal 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

December 2025

UKCEH British Geological Survey Department for Infrastructure An Roinn Bonneagair www.infrastructure-ni.gov.uk Environment Agency Met Office Cyfoeth Naturiol Cymru Natural Resources Wales sepa

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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:

UK Hydrological Outlooks, UK Centre for Ecology & Hydrology, Wallingford, Oxfordshire, OX10 8BB
t: 01491 838800 e: https://hydoutuk.net/contact

Reference for the UK Hydrological Outlook:

UK Hydrological Outlook, 05 December 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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British Geological Survey

Department for Infrastructure An Roinn Bonneagair www.infrastructure-ni.gov.uk

Environment Agency

Met Office

Cyfoeth Naturiol Cymru Natural Resources Wales

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