

SUMMARY The outlook for November is for above normal river flows in central and southern England, and some of these flows will be exceptionally high. Elsewhere river flows are likely to be in the normal to below normal range. For groundwater levels, above normal levels are expected, with the exception of East Yorkshire, Lincolnshire, Sussex and south Wales where normal levels are most likely. For November–January, the outlook is similar.

Rainfall:

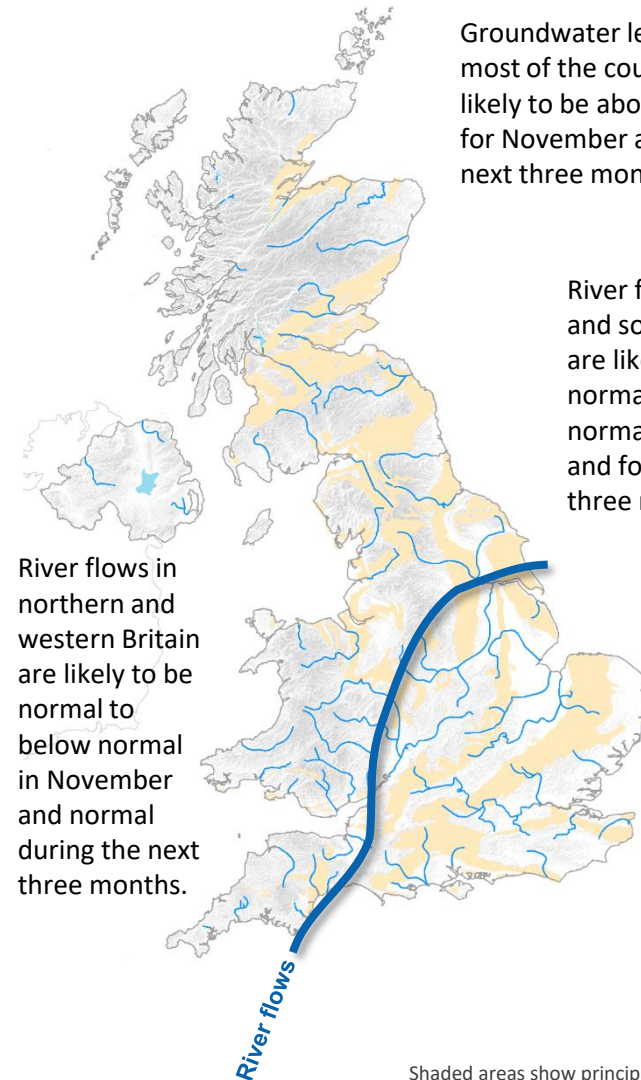
October rainfall for the UK was below average. Scotland, Wales and Northern Ireland saw below average rainfall, with some areas recording less than 70% of the October average. In England, rainfall was average, although some areas registered above normal rainfall, e.g. north-east, and southern England. The forecast (issued by the Met Office on 28.10.2024) shows that the chances of a dry or wet period for November, and for November – January is similar to normal. Although some uncertainty remains, the wettest conditions during the next three months are likely to be over northern and western parts of the UK.

River flows:

River flows in October were above normal in central and southern England, exceptionally so at many sites in this area, with some registering record October mean flows. A handful of sites recorded over 400% of the average October mean flows in southern England e.g. in the Cotswolds and Thames Valley. Elsewhere, flows in Scotland, Northern Ireland and north Wales were below normal. The outlook for November is for normal to above normal flows in central and southern England with exceptionally high flows expected to persist in some groundwater dominated catchments. Elsewhere, normal to below normal flows are expected. The outlook for the November – January period is similar.

Groundwater:

Groundwater levels in October were generally normal or above normal across the country. Record high October groundwater levels were registered at sites in central and southern England and in West Yorkshire. The outlook for November is for above normal levels, for most of the UK, with the exception in the Chalk in East Yorkshire, Lincolnshire and Sussex and in the Permo-Triassic sandstone in South Wales and the Central Midlands where normal levels are most likely. Over the three-month outlook, groundwater levels are generally likely to be in the above normal range across the country.



Groundwater levels for most of the country are likely to be above normal for November and for the next three months.

River flows in central and southern areas are likely to be normal to above normal in November and for the next three months.

River flows in northern and western Britain are likely to be normal to below normal in November and normal during the next three months.

Shaded areas show principal aquifers

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

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 AquilMod 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 is supported by the Natural Environment Research Council funded NC-UK (NE/Y006208/1) and [Hydro-JULES](#) (NE/S017380/1) Programmes.

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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](#).

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Reference for the UK Hydrological Outlook:

UK Hydrological Outlook, 08 November 2024, 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:

- Environment Agency: <https://flood-warning-information.service.gov.uk/map>
- Natural Resources Wales: <https://flood-warning.naturalresources.wales/>
- 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://nfa.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/>