

**SUMMARY** The outlook for February is for normal to above normal flows, and normal to exceptionally high groundwater levels to be seen across northern and eastern parts of the UK. Flows in south-western Britain and Northern Ireland are likely to be normal to below normal for February. This pattern is likely to persist for river flows over the next three months, whilst groundwater levels are likely to recess to be normal to above normal, with some normal to below normal exceptions.

**Rainfall:**

January rainfall was close to normal for the UK, though it was unevenly distributed. Above average rainfall was seen across northern England, northern Wales and north-eastern Scotland, whilst below average rain fell in western Scotland, Northern Ireland, and central and southern England. The forecast (issued by the Met Office on 29.01.2024) shows an increase in the likelihood of a dry February (1.5 times the normal chance), though the likelihood of a wet 3-month period is close to normal.

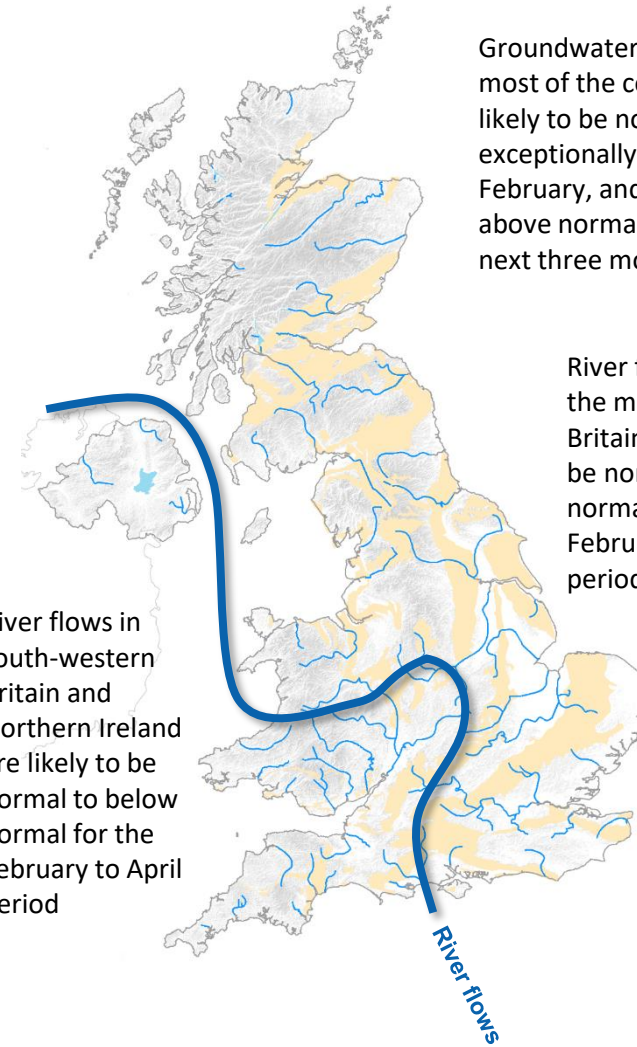
**River flows:**

River flows in January were generally normal to exceptionally high, with normal flows focussed across western parts of the UK and highest flows across the east and central southern England. These conditions show a reduction from the previous month. The outlook for February and the next three months is for river flows in south-western Britain and Northern Ireland to be normal to below normal. Flows elsewhere across Great Britain are likely to be normal to above normal over the next one-to-three months, with above normal flows most likely in eastern Scotland, north-east England and the chalk-driven catchments of the south downs and East Anglia.

**Groundwater:**

Groundwater levels in January were also normal to exceptionally high, with record high levels recorded in Brick House Farm and Aylesby in northern England. Normal groundwater levels were recorded in southern England, Scotland and Northern Ireland.

The outlook for February is for normal to exceptionally high groundwater levels to persist, with the possibility of below normal levels in the East Midlands. Over February to April as a whole, groundwater levels are likely to recess to normal to above normal across the UK, with the continuation of normal to below normal levels in the boreholes of the East Midlands.



Groundwater levels for most of the country are likely to be normal to exceptionally high for February, and normal to above normal over the next three months

River flows across the majority of Great Britain are likely to be normal to above normal for the February to April period.

River flows in south-western Britain and Northern Ireland are likely to be normal to below normal for the February to April period

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.hydoutok.net](http://www.hydoutok.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

## Disclaimer and liability:

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.

Your use of the Content is entirely at your own risk. We make no warranty, representation or guarantee that the Content is error free or fit for your intended use.

From April 2018 the UK Hydrological Outlook is supported by the Natural Environment Research Council funded [UK-SCAPE](#) and [Hydro-JULES](#) Programmes.

## Copyright:

Some of the features displayed on the maps contained in this report are based on the following data with permission of the controller of HMSO.

- Ordnance Survey data. © Crown copyright and/or database right 2005. Licence no. 100017897.
- Land and Property Services data. © Crown copyright and database right, S&LA 145.
- Met Office rainfall data. © Crown copyright.
- The three month outlook contained in the hydrological outlook is licensed under the terms of the [Open Government Licence](#)

All rights reserved. Unauthorised reproduction infringes crown copyright and may lead to prosecution or civil proceedings.

## 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, 08 February 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://nra.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/>