Period: From March 2024

Issued on 08.03.2024 using data to the end of February 2024

**SUMMARY** The outlook for March is for above normal flows to persist in central, southern and eastern England, and these areas are likely to see normal to above normal flows over the March-May period. In the north and west, normal flows are most likely in March and for March – May. For Groundwater levels, above normal levels are likely to persist for most of the UK through March, and for the March – May period in many aquifer areas.

### Rainfall:

February was a very wet month for England and Wales, and exceptionally wet across southern and central England, with many regions seeing the wettest February on record. Scotland, Northern Ireland and the far north of England saw near-average rainfall.

The forecast (issued by the Met Office on 26.02.2024) for March favours near-average conditions but indicates that the chance of a wet month is higher than a dry one. The March — May forecast favours near-average conditions but with a slightly higher chance of the season being dry rather than wet.

## **River flows:**

River flows in February were above normal across most of England and Wales, with widespread exceptionally high flows (and some new February maxima). For northern Britain, flows were in the normal range, with some above normal flows in northern Scotland.

The forecast for March is for above normal flows in central, southern and eastern England, with a likelihood of notably or exceptionally high flows persisting in some catchments. For the north and west, normal flows are the most likely outcome. The March – May outlook is for a similar geographical contrast, but with normal to above normal flows in the south and east, and a lower likelihood of exceptional flows. There is a slightly higher likelihood of below normal flows in the north and west, although normal flows remain the most likely outcome in these areas.

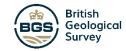
#### **Groundwater:**

Groundwater levels in February were mostly above normal, with the exception of a few boreholes in northern Britain. Exceptionally high levels were widespread across aquifers in England and Wales, with a number of new February maxima.

The outlook for March is for a continuation of above normal levels across most of the UK, with widespread notably or exceptionally high levels, particularly in the Chalk aquifer. The three-month outlook indicates above normal levels will persist through the spring in many areas, but an increasing number of boreholes will see levels entering the normal range.

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: <a href="https://www.hydoutuk.net">www.hydoutuk.net</a>













Groundwater levels across most of the UK are likely to be above normal over the next three months, with notably or exceptionally high levels likely in some areas

River flows for central, eastern and southern England are likely to be above normal in March and normal to above normal over the March-May period.

western Britain are likely to be normal in March and over the March-May period.

River flows in

northern and

Shaded areas show principal aquifers





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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 DflR. 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.

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

Percentile range of

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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, 08 March 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: <a href="https://www.gov.uk/government/collections/water-situation-reports-for-england">https://www.gov.uk/government/collections/water-situation-reports-for-england</a>

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

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

Hydrological Summary for the UK: provides summary of current water resources status for the UK: <a href="https://nrfa.ceh.ac.uk/monthly-hydrological-summary-uk">https://nrfa.ceh.ac.uk/monthly-hydrological-summary-uk</a>

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/







