

**SUMMARY** The outlook for April is for above normal river flows in central, southern and eastern England. These areas are likely to see normal to above normal river flows over the April-June period. In the north and west of the UK, normal to above normal river flows are most likely in April and for April-June. For Groundwater levels, above normal levels are likely to persist for most of the UK through April, and for the April-June period.

### Rainfall:

March continued a sequence of wet months, with above average rainfall in England, Wales, Northern Ireland and eastern Scotland. Western Scotland, and parts of East Anglia saw below average rainfall.

The forecast (issued by the Met Office on 02.04.2024) for April shows similar likelihoods of above- and below-average rainfall in April, but an increased chance of above-average rainfall in April to June.

### River flows:

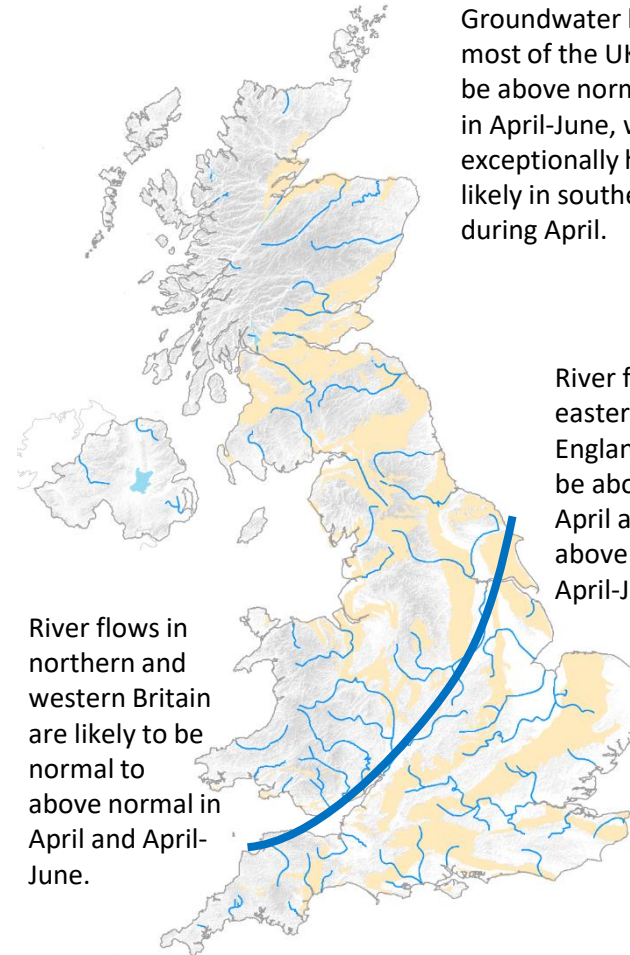
River flows in March were above normal across most of England and Wales, with widespread exceptionally high flows (with some sites recording the highest average March flow in their records). For northern Britain, flows were in the normal range, with some above below normal flows in northern Scotland.

The forecast for April 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 to above normal flows are the most likely outcome. The April-June outlook is for normal to above normal flows for the whole of the UK.

### Groundwater:

Groundwater levels in March were above normal, except for a few boreholes in northern Britain. Exceptionally high levels were widespread across aquifers in England and Wales, with several boreholes recording the highest March levels in their record.

The outlook for April 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 in many areas, but in some fast-responding areas such as the Jurassic limestones, levels may begin to recede with more boreholes entering the normal range.



Groundwater levels across most of the UK are likely to be above normal in April and in April-June, with notably or exceptionally high levels likely in southern Britain during April.

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

River flows in northern and western Britain are likely to be normal to above normal in April and April-June.

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](http://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 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, 09 April 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/>