

SUMMARY

The outlook for March and for the March–May period is for river flows to be normal to below normal for the south and south-east England and north-east Scotland, and normal to above normal elsewhere. Groundwater levels in March, and for the next three months, are likely to be normal to below normal across most of the UK, with a few localised exceptions.

Rainfall:

February saw about one and a half times the average rainfall for the UK, with a cluster of three named storms within the space of one week. Rainfall in February was above average for most of the UK except in southern England and north-east Scotland where it was near-average.

The rainfall outlook for March (issued by the Met Office on 28.02.2022) shows that the likelihood of both wet and dry outcomes is similar to normal. Over the three month period to May, there is an increased chance of dry conditions compared to normal.

River flows:

River flows in February were normal to below normal in the south and south-east England and above normal elsewhere, except in north-east Scotland where they were normal.

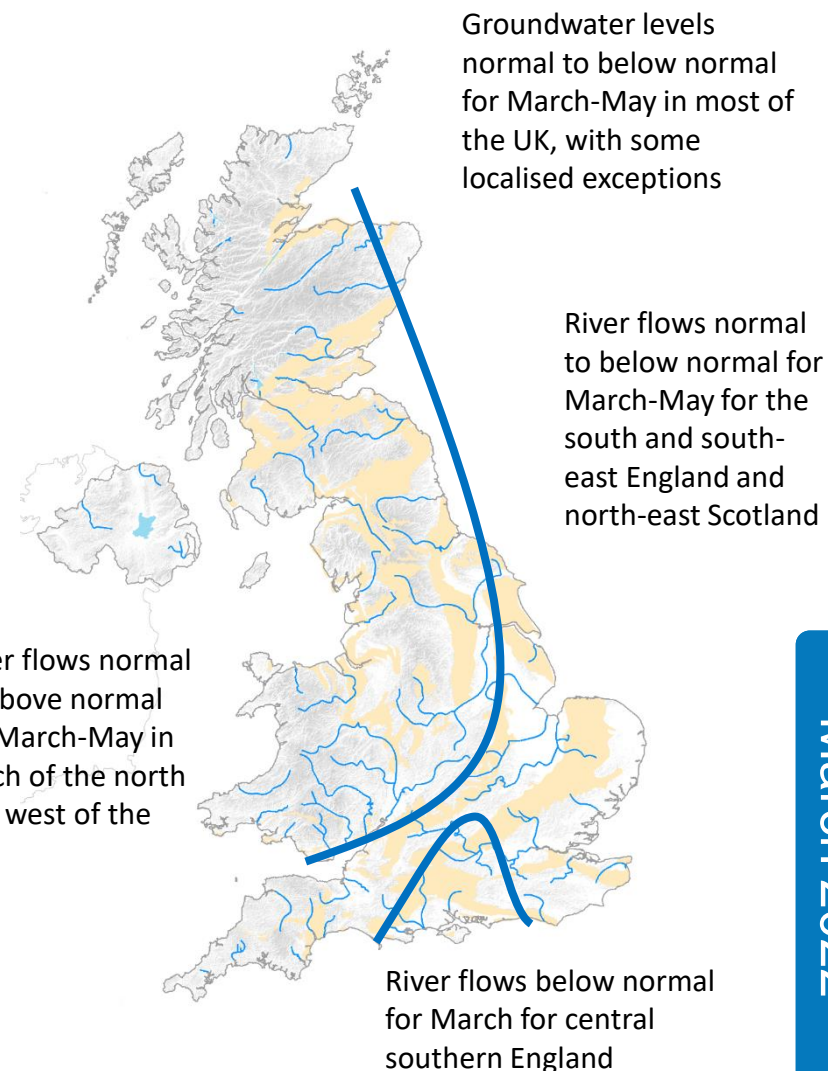
River flows in March are likely to show similar patterns to February. Normal to below normal flows are expected across much of the south and east of England and north-east Scotland, with below normal flows being most likely in central southern England. Normal to above normal flows are most likely in the rest of the country. A similar picture is seen for the March–May period, but with a higher likelihood of normal flows across the UK.

Groundwater:

Groundwater levels in February were normal to below normal in southern England, with a very mixed picture across the rest of the country.

Over the next month, normal to below normal groundwater levels are forecasted across much of England and Wales, with a few localised exceptions in some central and northern aquifers. The three month outlook is similar, but with an increased likelihood of below normal groundwater levels with some notably low levels possible in parts of the Chalk.

The Hydrological Outlook UK provides an outlook for the water situation for the UK 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.hyoutuk.net



Shaded areas show principal aquifers

About the 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 and 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 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, PDM and CLASSIC hydrological models and by the EA using CATCHMOD. Hydrogeological modelling uses the R-groundwater model run by BGS and CATCHMOD run by the EA. Supporting documentation is available from the Outlooks website: <https://www.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 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 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 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.

- (i) Ordnance Survey data. © Crown copyright and/or database right 2005. Licence no. 100017897.
- (ii) Land and Property Services data. © Crown copyright and database right, S&LA 145.
- (iii) Met Office rainfall data. © Crown copyright.

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

Further information:

For more detailed information about the Hydrological Outlook, and the derivation of the maps, plots and interpretation provided in this outlook, please visit the Hydrological Outlook UK 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.

Contact:

Hydrological Outlooks UK, UK Centre for Ecology & Hydrology, Wallingford, Oxfordshire, OX10 8BB
t: 01491 692371 e: enquiries@hydoutuk.net

Reference for the Hydrological Outlook:

Hydrological Outlook UK, 2022, March, UK Centre for Ecology and Hydrology, Oxfordshire UK, Online, <https://www.hydoutuk.net/latest-outlook/>

Other Sources of Information:

The 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/#?tab=regionalForecast>

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/>