

SUMMARY

The outlook for June and for the June–August period is for river flows to be normal to above normal in most parts of the UK, the exception being the north west of Scotland and Northern Ireland where normal to below normal flows are likely in June. Groundwater levels in June, and for the next three months, are likely to be normal to above normal across most of the UK, the exception being the south east of England where normal to below normal levels are expected.

Rainfall:

May was exceptionally wet in many areas with twice the typical May rainfall across Wales, southwest England and large parts of north east Britain. Only in north west Scotland was rainfall below average. June has started with a spell of more settled, dry and warm weather.

The rainfall outlook for June (issued by the Met Office on 24.05.2021) suggests the chances of wet and dry conditions are similar to normal. Over the three month period to August, a similar picture is seen, with the chances of a wet or dry summer being similar to normal.

River flows:

River flows in May were above normal across most of England and Wales, with exceptionally high flows in the west, and a number of new flow records in Wales. Flows were in the normal range in Northern Ireland and parts of southeast England.

River flows in June are likely to be normal to above normal across most of the UK, except in northwest Scotland where flows are likely to be normal to below normal. Over the three month period May-June-July similar conditions will prevail, with normal to above normal flows being the most likely outcome across the UK.

Groundwater:

Groundwater levels in May showed a mixed picture. Normal to below normal levels in the Chalk of central southern England contrasted with normal to above normal levels in the Chalk further north. In most other aquifers, levels were above normal, and exceptionally so in some northern boreholes.

The outlook is broadly similar to the pattern for May, and consistent across both the 1-month and 3-month forecasts, with normal to below groundwater levels across a large part of the southern and central Chalk, and normal to above normal levels elsewhere, with some exceptionally high levels predicted in the Permo-Triassic of northern Britain.

Note that due to unforeseen circumstances no data are available for Scotland

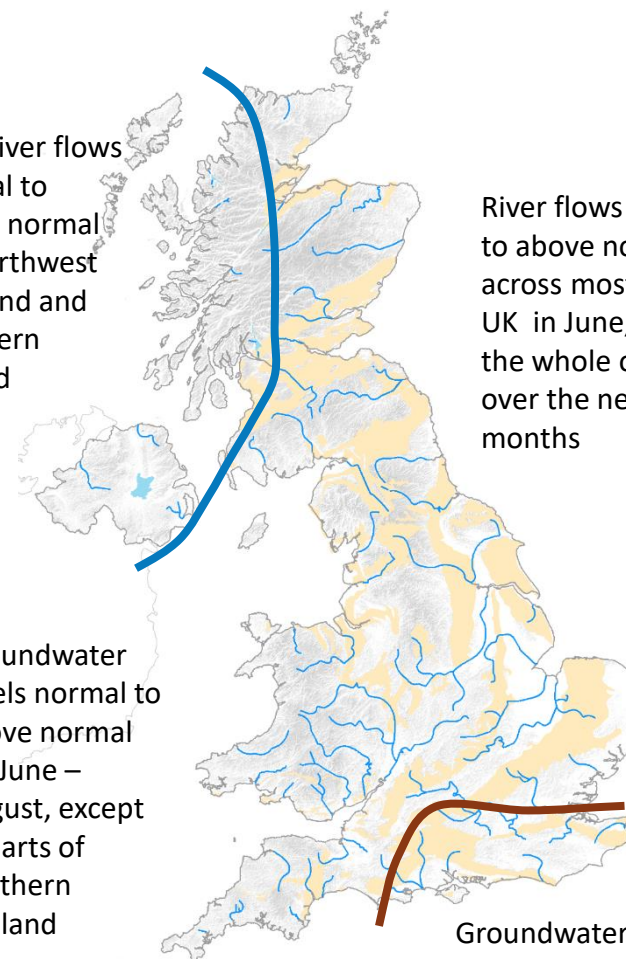
The Hydrological Outlook UK provides an outlook for the water situation for the UK over the next three months and beyond. For guidance on how to interpret the outlook, a wider range of information, and a full description of underpinning methods, please visit the website: www.hydoutuk.net

June river flows normal to below normal for northwest Scotland and Northern Ireland

River flows normal to above normal across most of the UK in June, and for the whole of the UK over the next three months

Groundwater levels normal to above normal for June – August, except in parts of southern England

Groundwater levels normal to below for June-August



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).

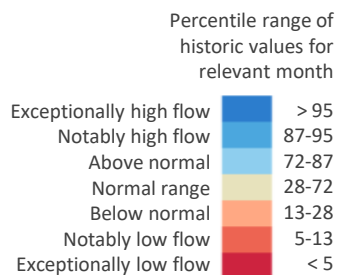
Data and Models:

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: <http://www.hydoutuk.net/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.



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

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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.

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Reference for the Hydrological Outlook:

Hydrological Outlook UK, 2021, April, UK Centre for Ecology and Hydrology, Oxfordshire UK, Online, <http://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>
Scottish Environment Protection Agency: <http://www.sepa.org.uk/flooding.aspx>

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

UK Met Office forecasts for the UK: www.metoffice.gov.uk/public/weather/forecast/#?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/>