

SUMMARY

The outlook for July and for the July–September period is for river flows to be normal to below normal for northern areas of the UK, and normal to above normal elsewhere. Groundwater levels in July, and for the next three months, are likely to be normal to above normal across most of the UK, the exception being the far south of England where normal to below normal levels are expected.

Rainfall:

June saw a reversal of the usual rainfall gradient: it was very dry across northern and western Britain, with less than a third of the typical rainfall in some areas, and very wet in south-east England, where some areas experienced twice the typical June rainfall.

The rainfall outlook for July (issued by the Met Office on 28.06.2021) suggests an increased chance of dry conditions compared to normal. Over the three month period to September, a similar picture is seen.

River flows:

River flows in June were below normal in parts of northern England, north Wales and Northern Ireland. Flows were above normal across much of southern England and parts of east Anglia.

River flows in July are likely to show a similar spatial contrast to June. Normal to below normal flows are expected across northern areas, with below normal flows being most likely in parts of Scotland. Normal to above normal flows are expected elsewhere, with the highest likelihood of above normal flows being for the far south-east of England. A similar picture is seen for the June–September period, but with a higher likelihood of normal flows across the UK.

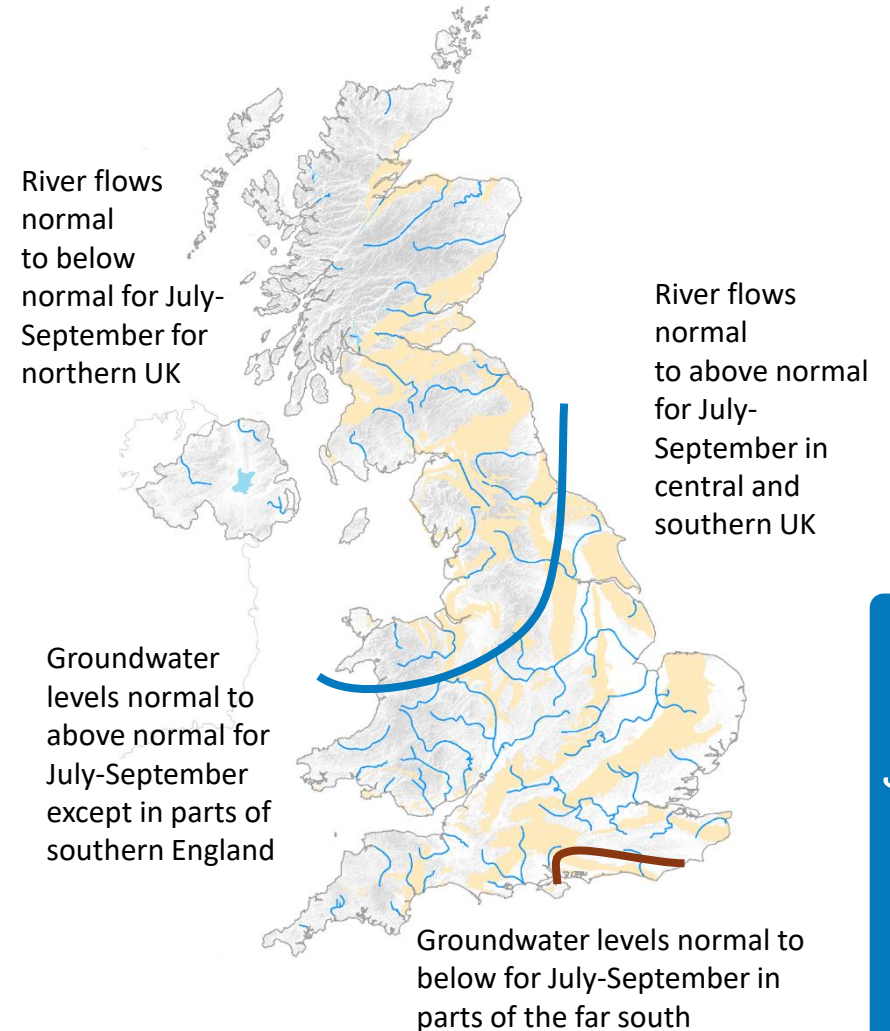
Groundwater:

Groundwater levels in June showed a mixed picture. Below normal levels in the Chalk of the far south contrasted with mostly normal to above normal levels in the Chalk further north. In most other aquifers, levels were normal to above normal.

The July outlook is broadly similar to the pattern for June. Normal to below normal levels are likely to persist in parts of the south, but elsewhere normal to above normal levels are expected. Over the three month timeframe the outlook is similar, but with levels at more locations tending towards normal.

Note that due to continuing issues with data access, 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



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).

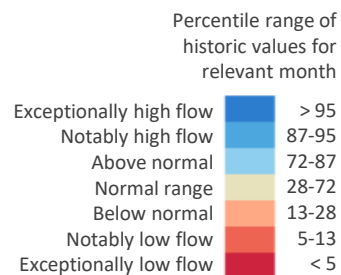
Data and Models:

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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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://nfa.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/>