

SUMMARY

The outlook for September is for normal to above normal river flows in southern England, and normal to below normal for the rest of the country. Groundwater levels are expected to be mostly normal, except in the Southern Chalk and Jurassic Limestone where they are likely to be above normal. River flows and groundwater levels are expected to return to normal for the September–November period for most of the country.

Rainfall:

Rainfall in August for most of Great Britain was near average, though central England and southwestern Scotland experienced slightly below normal rainfall. Northern Ireland received slightly above normal rainfall.

The meteorological outlook (issued by the Met Office on 29.08.2023) for September shows an increased likelihood of having warmer conditions, with rainfall conditions likely to be close to normal for the time of year over the Sept-Nov period. However, the very dry start of the month suggests the overall conditions for September are now likely to be drier than normal.

River flows:

River flows in August were normal for most of Scotland, and normal to above normal for the rest of the country, except for an isolated area in East Anglia where flows were below normal.

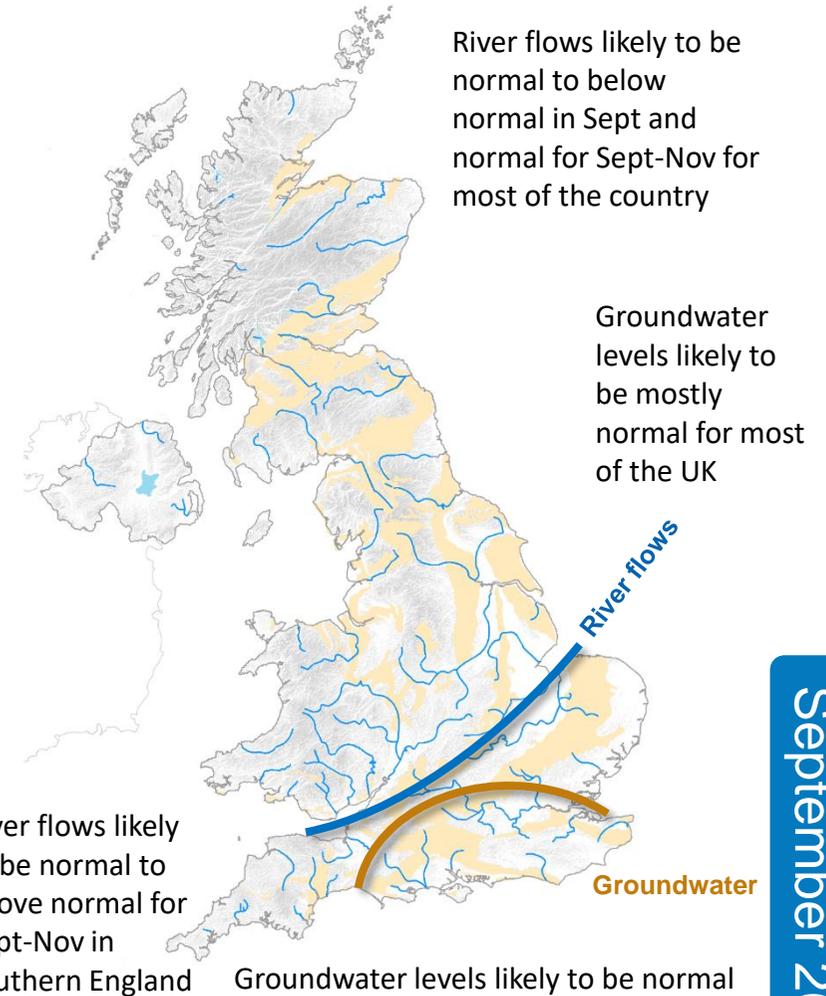
River flows in September are likely to be below normal in northeastern Scotland, and normal to below normal for most of the rest of country, except in southern England, where flows are expected to be normal to above normal. Flows are expected to return to normal for most of the country in the Sept-Nov period, except in northeastern Scotland and in southern England where they are likely to remain normal to below normal and normal to above normal respectively.

Groundwater:

Groundwater levels in August were below normal in northern Scotland, and normal to above normal for the rest of the country. Some of the boreholes situated in the southern Chalk and Jurassic limestone experienced particularly high levels.

Over the next month, groundwater levels are expected to remain above normal in parts of the southern Chalk and Jurassic Limestone, whereas they are likely to be normal in most of the rest of the country, though normal to above normal or normal to below normal levels are expected for some isolated locations. Over the next 3 months levels in the south are expected to return towards normal.

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

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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, July, 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/>