



Period: From June 2022

Issued on 10.06.2022 using data to the end of May 2022

### **SUMMARY**

The outlook for June and for June–August is that below normal river flows are likely in south Wales and southern and central England, and normal to below normal flows elsewhere. Groundwater levels in June and over the three-month timeframe are likely to be normal to below normal across most of the UK.

## **Rainfall:**

Rainfall in May was below average across Wales and East Anglia, although elsewhere in England conditions were more variable owing to localised rainfall. Northern Ireland recorded above average rainfall and north-west Scotland was exceptionally wet.

The rainfall outlook (issued by the Met Office on 30.05.2022) for June and for the June-August period suggests that there is an increased likelihood of near-average rainfall rather than wet or dry weather.

# **River flows**

River flows in May were generally below normal or lower across England and Wales, notably so in south-west England and south Wales. New monthly flow minima for May were established on some rivers in south Wales and the Midlands.

River flows in June are likely to be below normal across much of south Wales and southern and central England, with high confidence in outlooks for continued low flows for some catchments in south-east England. Elsewhere, normal to below normal flows are most likely. The same scenario is likely over the three-month timeframe, with below normal flows particularly likely in some catchments in south-east England.

# Groundwater

Groundwater levels in May were normal to below normal across most of the UK. Levels in south Wales and in some boreholes in southern England and southern and eastern Scotland were notably low.

Levels in June are likely to be normal to below normal in most boreholes. Notably low groundwater levels are particularly likely for some boreholes in southern England and south Wales. The three-month outlook is similar to the one-month outlook, though with below normal levels tending more towards the normal range in some boreholes in southern England.

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













Shaded areas show principal aguifers

Groundwater

be normal to below normal for

levels are likely to

June-August for

most of the UK



River flows are

most likely to be

normal to below

normal for June-August in northern

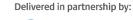
parts of the UK

River flows are likely to be below normal for June and over June-August for southern and central England, and south Wales



June 2022





UK Centre for Ecology & Hydrology

## 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.



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.

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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.

#### Contact:

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#### Reference for the Hydrological Outlook:

Hydrological Outlook UK, 2022, June, 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: <u>https://flood-warning-information.service.gov.uk/map</u> Natural Resources Wales: <u>https://flood-warning.naturalresources.wales/</u>

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: <u>https://nrfa.ceh.ac.uk/monthly-hydrological-summary-uk</u>

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: <a href="https://eip.ceh.ac.uk/hydrology/water-resources/">https://eip.ceh.ac.uk/hydrology/water-resources/</a>