Centre for Ecology & Hydrology
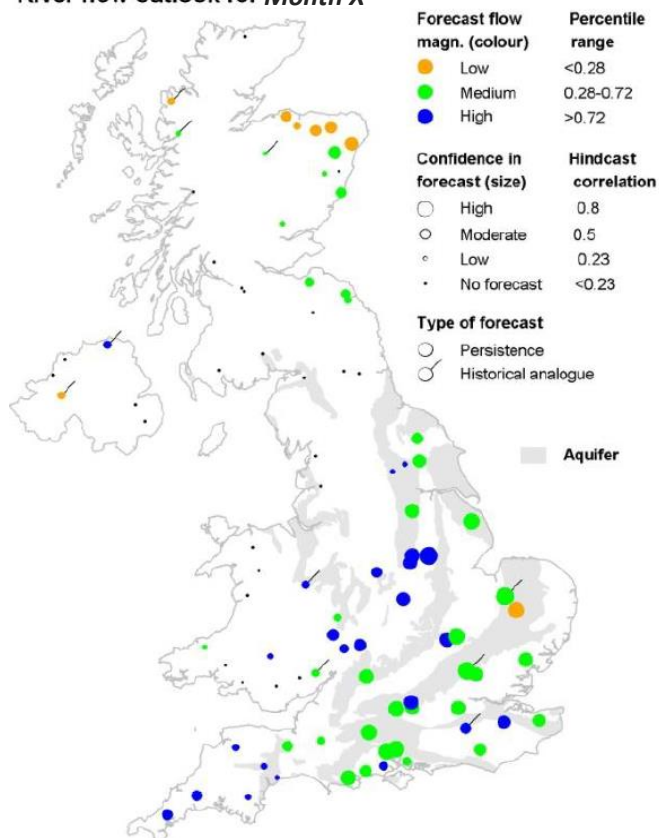NATURAL ENVIRONMENT RESEARCH COUNCIL

SUMMARY
For *Month X*, normal to above normal flows across the southeast but normal to below normal flows in eastern and northern Scotland. A similar pattern persists in the 3-month flow outlook. This methodology produces few forecasts for the northwest of the UK and Wales.

River flow outlook for *Month X*

Forecast flow magn. (colour)	Percentile range
🟠 Low	<0.28
🟢 Medium	0.28-0.72
🔵 High	>0.72

Confidence in forecast (size)	Hindcast correlation
○ High	0.8
○ Moderate	0.5
∘ Low	0.23
· No forecast	<0.23

Type of forecast
- Persistence
- Historical analogue

Aquifer

1-month flow outlook

Outlooks from hydrological analogues are based on a comparison of river flow during recent months with flows during the same months in previous years at a set of approximately 100 sites from across the UK. These sites are depicted on the two maps. Years with observed flows that most closely resemble current conditions are identified as the best analogues and the outlook is based on extrapolating from current conditions based on these analogues.
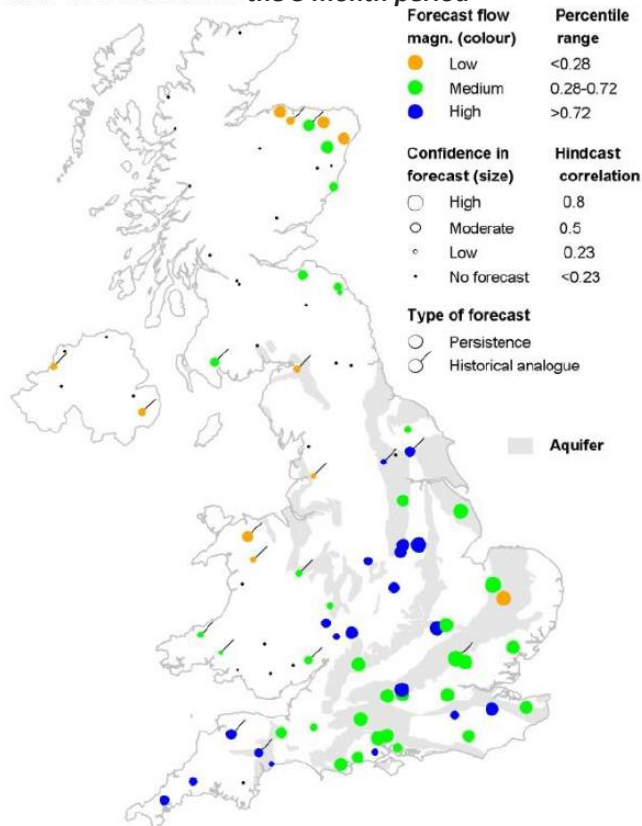
It is, however, often the case that a simpler forecast based on the persistence of river flow provides a better forecast than provided by analogy. This is particularly true for slowly responding catchments associated with aquifer outcrops.

Both methods are considered at each site and the forecast from the method with the higher confidence is presented. A simple classification of flows is used (high, medium and low) as indicated by the colours of the dots, with the confidence of the forecast being represented by the size of the dot. A tag on the dot indicates which method has been used in each instance.

**Centre for
Ecology & Hydrology**
NATURAL ENVIRONMENT RESEARCH COUNCIL

FLOW ANALOGY

SUMMARY
For *Month X* , normal to above normal flows across the southeast but normal to below normal flows in eastern and northern Scotland. A similar pattern persists in the 3-month flow outlook.
This methodology produces few forecasts for the northwest of the UK and Wales.

River flow outlook for *the 3 month period*

Forecast flow magn. (colour)	Percentile range
● Low	<0.28
● Medium	0.28-0.72
● High	>0.72

Confidence in forecast (size)	Hindcast correlation
○ High	0.8
○ Moderate	0.5
○ Low	0.23
· No forecast	<0.23

Type of forecast
○ Persistence
⊘ Historical analogue

▨ Aquifer

3-month flow outlook

Outlooks from hydrological analogues are based on a comparison of river flow during recent months with flows during the same months in previous years at a set of approximately 100 sites from across the UK. These sites are depicted on the two maps. Years with observed flows that most closely resemble current conditions are identified as the best analogues and the outlook is based on extrapolating from current conditions based on these analogues.

It is, however, often the case that a simpler forecast based on the persistence of river flow provides a better forecast than provided by analogy. This is particularly true for slowly responding catchments associated with aquifer outcrops.

Both methods are considered at each site and the forecast from the method with the higher confidence is presented. A simple classification of flows is used (high, medium and low) as indicated by the colours of the dots, with the confidence of the forecast being represented by the size of the dot. A tag on the dot indicates which method has been used in each instance.