



Hydrological Outlook UK: an operational streamflow and groundwater level forecasting system at monthly to seasonal time scales

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Recent ability to provide skilful hydrological forecasts at monthly and seasonal lead times to the water sector has borne the first operational seasonal hydrological forecasting service in the UK, the Hydrological Outlook UK. This service has been delivering monthly forecasts of streamflow and groundwater levels focusing on the next 1 to 3 months, with outlooks over longer time horizons in situations known to have more skill, since June 2013. The system is based on 3 complementary approaches: i) National-scale modelling of streamflow and groundwater levels based on dynamic rainfall forecasts, ii) catchment-scale modelling of streamflow and groundwater levels driven by historic climate forcings following the Ensemble Streamflow Prediction (ESP) approach, and iii) a catchment-scale statistical method based on historical analogues and persistence. Output from each of three methods are combined with expert judgment during a monthly forecasters meeting to agree on high-level messages from the results. A 1-page Hydrological Outlook UK summary is produced and disseminated through the project's web-site and attracts a monthly average readership of about 300. Experience in developing and implementing the system, and engaging with stakeholders will be shared.

On behalf of the Hydrological Outlook UK partners, see: www.hydoutuk.net/