



Explosion of hydrological science in the UK in the late 1960s and early 1970s

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Hydrological science had an unusual birth in the UK: Government-funded science in a research institute preceded its development in the universities. Before the late 1960s, a few, disparate hydrologists worked individually, or in very small teams, in engineering firms, in the Nature Conservancy, in the Meteorological Office, in the British Geological Survey or in university engineering, geography and geology departments. With the launch of a dedicated Institute of Hydrology in the late 1960s, an opportunity arose to redefine hydrology as a science by setting new agendas to tackle fundamental processes and systems, both short-term and long-term.

This advent was based on financial investment on an unprecedented scale which allowed multi-disciplinary teams both to study natural processes and to pioneer quantitative analysis using early computers. Funding came with a challenge to prove hydrology as a scientific discipline to justify its support by Government in a very competitive environment.

Freedom to undertake fundamental research with only long-term pay-backs was threatened from the start. Yet, in the late 1960s, failure of an attempt by a rival university group to simulate catchments in a laboratory allowed continued investment in outdoor catchment research. Also, some aspects of hydrology, such as water chemistry, were deemed adequately-funded elsewhere and so neglected in this early phase although subsequently demonstrated to be essential to hydrological progress. The initiative of publicly-funded scientists to set their own agendas was further constrained by introduction of a customer-contractor principle in the early 1970s. This enabled 'customers' in Government departments to 'contract' the scientists to research topics considered useful. The history of funding of UK hydrology in this critical decade is examined through participant observation of the politics of science funding within the Natural Environment Research Council and by analysis of reports and academic literature.