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Reconciling questions with the need for answers.

Over recent decades a multitude of hydrological models have been developed and tested in the quest to find the Holy Grail answer to our understanding of hydrological processes. It should have been apparent long since that no such answer exists and that our efforts would be better placed if targeted towards achieving the best practical solutions to real problems. In this presentation, I will revisit the learning framework proposed by Dunn et al. (2008), alongside similar calls from other scientists, to review how successfully we have managed to implement such modelling approaches within a policy driven research environment. The learning framework involves a cyclical iterative procedure that co-constructs a model application through a dialogue between stakeholders, field scientists and modellers, based on a combination of available data and a clearly defined end point. Case studies of some recent model applications to address catchment water quality issues will be reviewed, to assess how well we have managed to follow the learning framework and to identify its strengths and the factors limiting its success. This will include consideration of both the robustness of the science as well as satisfaction of the end-user.