



## **Robert E. Horton's Concepts of Infiltration and Runoff**

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Robert Elmer Horton (1875-1945) was one of the most important hydrologists of the 20th Century. His legacy is recognised in the concept of “Hortonian overland flow”, long considered the dominant mechanism of storm runoff generation (and still the basis for some models of catchment hydrological response). Horton’s ideas about infiltration and runoff and the problems of predicting hydrographs were much more sophisticated than he is commonly given credit for in modern hydrological texts. Drawing on some of his unpublished writings, this presentation will give a summary of Horton’s ideas, and some of the difficulties he had in applying his process understanding in the 1930s and 1940s.