

ABSTRACT

THE SIGNIFICANCE OF LOGISTICS TO HYDROLOGY

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Theories and methods of logistics are useful for solution of some problems in hydrology. While depression storage is often mentioned as part of the rainfall runoff sequence, it is generally ignored in working models because past formulations proved too inflexible in practice. However, if the filling of depressions over a watershed by rainfall is viewed as a problem in logistics, then utilization of the depression storage concept becomes feasible. Another application falls in the realm of aquifer depletion: logistics can furnish a model of the depletion profile. Turning from theory to methods developed in logistic applications for estimating parameters of nonlinear functions, one finds that such methods deserve inclusion among those recognized in hydrology. Estimation of parameters for infiltration curves from field data, for example, can be accomplished advantageously with logistic methods. A bibliography is appended because here it is intended to introduce merely the potentialities of logistic studies.