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Continued on Inside Back Cover



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MESSAGE FROM EDITOR'S DESK

The present issue of IWRS Journal (Vol. 39, No. 1, Jan. 2019) broadly covers researches pertaining to application of ANN, canal lining & optimization, infiltration studies, water management planning, flood forecasting, etc. The first paper investigates applicability of ANFIS, ANN and MLR methods to predict the recharging rate of storm water filter. The paper concludes that ANN is capable of predicting accurate recharging rate of storm water filter system. In the second paper, an attempt has been made to design an optimal canal section with consideration of minimum cost of lining material. The third article aims at to investigate the potential of SVM, GP and ANFIS based regression approach in estimation of cumulative infiltration of soil. It was concluded that RBF based GP regression approach works better than SVM, ANFIS and other conventional Kostiaikov and SCS models in this study. The fourth paper attempts to investigate floods of various return periods for the seven stream flow gauging sites lying in the river reach (major alluvial river in northern part of India) under study using the L-moments approach. Depth of flooding and inundation for various return periods have been simulated using the HEC-RAS model. The study would help in providing improved flood hazard warning and lead to better flood management and flood damage reduction. The fifth paper aimed at to develop a water management plan for the Ibrahimpur-Masahi Gram Panchayat (Dist. Haridwar, Uttarakhand). The suggested water conservation measures viz., rooftop water harvesting, rejuvenation of ponds, developing eco-friendly natural treatment systems in villages, etc. will improve rural economy/livelihood opportunities, water security and environmental conditions in the villages. In the last paper, flood forecasting and inundation mapping of a river basin in south-east India has been attempted. Flood inundation maps prepared in the study using HEC-RAS and design flood hydrograph are useful to local administration and public to keep better preparedness & mitigate effects of flooding in the area.



With the understanding that the journal has been publishing the quality researches showing state-of-the art developments in respective fields, it is hoped that the current issue of IWRS would also be useful to all working in the area of water sector.

(S.K. Mishra)

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