

عنوان مقاله:

The use of Unaccounted Water Patterns in Water Distribution Network Model Calibration

محل انتشار:

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خلاصه مقاله:

With the growth of the urban population and the development of cities, water distribution systems have become very important. Considering the complexity of these systems and the large scale of decision-making in analysis, design, operation and maintenance, the need for computer modelling of networks has become more important. The most important issue in modelling is consistency between calculated and measured data. The amount of unaccounted water in a distribution system can be determined by conducting water balance studies in the system or in an enclosed measurement area. It can be seen that determining the optimal pattern of unaccounted water to complete the data of total water consumption in the network in a seta model, in a situation where the results of unaccounted water studies are not available, is still needed as one of the main elements in model calibration. . In order to solve this problem, the current research was carried out in order to review and improve the continuous model of water distribution network by introducing, checking and implementing an optimal integrated experimental approach of the unaccounted water model. The use of the option of the inverse model of the customers' consumption is not considered as a water model; for calibrating the hydraulic model of the distribution network, it provided a more acceptable simulation in the .maximum range from ۳۰% to ۴% and in the average maximum difference from ۲۳% to ۳%

کلمات کلیدی:

Water Distribution Network, unaccounted water, Measurement, model

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