

عنوان مقاله:

Comparing the Estimation of Suspended Load using Two Methods of Sediments Rating Curve and Artificial Neural (Network (A Case Study: Cham Anjir Station, Lorestan Province

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نویسندگان:

Bahador Abbaspour - M.S. Student of Water Structures, Water Engineering Department, Lorestan University

Amir Hamzeh Haghiabi - Associate Professor, Water Engineering Department, Lorestan University

خلاصه مقاله:

It is significantly important to predict and estimate the sediment load of the rivers to manage rivers and dam reservoirs in water projects. In this study, the suspended load of the river is predicted using artificial neural network. In this paper, it is attempted to evaluate the performance of artificial neural networks in predicting the suspended sediments. Using ANN (Multilayer Layer Perceptron Model), the suspended sediment in hydrometric station of Cham Anjir river of Khorramabad has been predicted and the results have been compared with sediment rating curve. Based on the obtained results, ANN presents acceptable results in simulating the suspended load in Cham Anjir station, in such a way that it is of higher accuracy compared to sediment rating curve. The results showed that ANN could be employed to estimate the sediment suspendedload with appropriate accuracy and more confidence compared to the rating curve. Here, it should be noted that neural network could not predict the peaks accurately, and this is regarded as a weak point of this model

کلمات کلیدی:

Suspended Sediment, ANN, Sediment Rating Curve, Khorramabad River

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