عنوان مقاله:
Simulation Of Water Level In The Aras River Using Onedimensional Hydrodynamic Model

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#### Abstract

Using of computer models is an adequate tool for simulation of flow and water level conditions in the rivers which can be the basis for planning and implementation of water engineering projects. A onedimensional (1D) hydrodynamic model is used to simulate the water level with limited available data in the Aras River. In this study, an attempt has been made to extract the river cross-sections from GIS using HEC-GeoRAS and extracted cross-sections were used in the MIKE 11HD model for the simulation ofwater level at various sections of the Aras river. Manning's roughness coefficient 0.033 was considered for Aras River and computational results were compared and evaluated with observational data. The model was calibrated and validated for the periods May 22 to December 21, 2006, and December 22, 2007 to May 21, 2008 respectively. The model-simulated water level are found to be in close agreement with the observed ones. The study demonstrates the usefulness of using the GIS to derive river crosssections for use in hydrodynamic modelling studies




