

ASSESSMENT OF RENEWABLE GROUNDWATER RESERVE FOR THE NORTH OF TIEN RIVER AREA BY MODELLING METHOD

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Summary

The renewable groundwater reserve is an important indicator that can support the management agencies in planning groundwater exploitation and reducing the risk of depletion. The assessment of groundwater reserve particularly and renewable groundwater reserve as a whole is a complex problem, because they are consist of many different sources, being dynamic and static. Calculation of groundwater reserve by an analytical method usually gives less exact results since it cannot take into account completely all dynamic reserve components. Groundwater flow model is a tool that can calculate all groundwater reserve components, therefore it gives more reliable information about groundwater reserve. As a result, renewable groundwater reserve in North of Tien river area is 69 million m³/year. In which, the recharge from rainfall and rivers are 80 million m³/year. Total groundwater reserve flowing into the model area from the northern and northwestern boundaries is 319 million m³/year, flowing out of the model area to the south and southeast is 330 million m³/year, lacking about 11 million m³/year.

Keywords: *Renewable groundwater reserve, North of Tien river area, modelling.*