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ASSESSMENT CONTAMINATION HAZARD OF IRANSHAHR AQUIFER TO BY USING OF DRASTIC & GIS

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Abstract

The important portion of require water for agriculture, urban and domestic consumption supply from groundwater. Many aquifers confront with negative budget in Iran. In addition, increasing population, burgess development, land changes and agriculture with industrial pattern accuse groundwater contamination. So, it is necessary to use a suitability tool to manage groundwater. In this paper, the aquifer vulnerability contamination has been studied on the basis of hydraulic and hydrogeology parameters of aquifer. For this reason, we used DRASTIC model, Geographic Information System (GIS) and remote sensing to analyze aquifer qualitative process. Four classes namely no risk, low vulnerability, medium vulnerability and high vulnerability have been considered for this study. The vulnerability map of Iranshahr aquifer was made developed in GIS environment. The vulnerability map of Iranshahr aquifer shows that about %6 of the area falls within no risk area. The study also shows that %47 of the area falls in low vulnerability and %52.4 in medium vulnerability. The study reveals that the low vulnerability areas located in the north, south and east of the plain..

Keywords: *Groundwater vulnerability / pollution hazard / DRASTIC& GIS index / Iranshahr aquifer.*

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