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# GROUNDWATER POLLUTION VULNERABILITY USING THE DRASTIC MODEL IN A GIS ENVIRONMENT, DEVAK-RUI WATERSHEDS, INDIA

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***ABSTRACT***
*Assessment of groundwater pollution vulnerability using the DRASTIC model in a GIS environment has become more widespread for effective groundwater planning and management. Groundwater vulnerability is based on the assumption that the physical environment may provide some degree of protection to groundwater against contamination entering the subsurface environment. Groundwater pollution vulnerability maps are useful for groundwater quality monitoring, and to identify areas that need more detailed analysis for land use planning. The DRASTIC standardized system for evaluating groundwater pollution potential is based on different parameters, such as depth to water, net recharge, aquifer media, soil media, topography, impact of vadose zone and hydraulic conductivity. The thematic layers of each parameter have been prepared and integrated through the DRASTIC model within a GIS environment to demarcate vulnerable zones. DRASTIC indices for both normal and agricultural pollutants have been derived to prepare groundwater vulnerability maps.*

**Reference:** *Jasrotia, A.S., and R. Singh. 2005. Groundwater pollution vulnerability using the drastic model in a GIS environment, Devak-Rui Watersheds, India, Journal of Environmental Hydrology, Vol. 13, Paper 11.*

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