Geophysical Research Abstracts, Vol. 8, 03419, 2006 SRef-ID: 1607-7962/gra/EGU06-A-03419

© European Geosciences Union 2006



Groundwater vulnerability assesment for Mostistea Plain - hydrogeological GIS database for DRASTIC index method

M. Pancescu

National Institute of Hydrology and Water Management Bucharest, Romania

The elaboration of a standard aquifer vulnerability evaluation methodology is an issue of great scientific and technical interest all over the world.

This paper presents the application of an evaluation methodology for the vulnerability of the Mostistea Plain aquifer using the Geographical Information Systems; it has as objective the regionalization of the aquifer in areas with different degrees of vulnerability to pollution.

The use of GIS techniques for the elaboration of vulnerability studies is recommended first of all due to the automatization of certain operations that require complicated mathematical algorithms, and secondly due to the ease of the interpretation of results. Thus, the use of map overlay and map modeling rapidly obtained a vulnerability map of the aquifer to pollution, through the multiplication of the 7 maps of the parameters that were taken into account; this way working time and the working personnel is reduced.