Geophysical Research Abstracts,
Vol. 10, EGU2008-A-11687, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-11687
EGU General Assembly 2008

Transboundary groundwater between Bulgaria and Romania - hydrogeological conditions, qualitative and chemical status

R Gorova (1), Daniela Deneva (1)
(1) Ministry of Environment and Water, Sofia, Bulgaria

A PHARE project “Integrated Management of Transboundary Groundwater between Bulgaria and Romania in Dobrudja/Dobrogea Area - Technical Assistance to ensure transboundary groundwater management using the WFD and Groundwater Directive” was carried out in Bulgaria, where the Bulgarian Executive Environment Agency was one of the beneficires of the project and one of sources of data for the project. During the project was gathered groundwater information from different sources, evaluation of quality of data, gaps in data, missing information was determined as well. It was collected geological information, groundwater abstractions data, groundwater temperatures, groundwater chemical data, data from monitoring of groundwater quantity and quality, transmissivity of the groundwater bodies, climatological data, river discharge data etc. These data were gathered for Bulgarian and for Romanian parts of the groundwater bodies. Two groundwater bodies are dominant as groundwater reservoirs: deep, Upper Jurassic-Lower Cretaceous or Malm-Valanginian aquifer, and upper, Neogene or Sarmatian aquifer. Both are formed in carbonate rocks, limestone, dolomitic limestones and dolomites mainly. The database with litho-stratigraphic description of wells contains about 420 well sites was created. The information is required for conceptual and finally accepted model, for checking on and recommending groundwater monitoring networks (quality and quantity), and for evaluating resources. After that selection and validation of groundwater model were made by MIKE SHE. Establishment of joint BG-RO groundwater system has been done. Development of joint transboundary groundwater monitoring programme was made as well, including measuring monitoring points, sampling sites (points) and monitoring parameters

were recommended. The results of the groundwater model can be shown and the new developed groundwater qualitative and quantitative monitoring networks as well.