

HYDROECOLOGICAL PROBLEMS IN SARAJEVO BASIN

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During the year of 2016, the residents of Sarajevo were faced with the problems of proper water supply. Problems would be tolerant for extremely arid year, which can be normal occurrence in moderately warm and humid climate which is present in Sarajevo basin and on the mountain plains that gravitate to it. Year in question was considerably humid with increased rainfall, which forms vadose contact in river systems that drain toward the river Bosnia, the main hydrological backbone of Sarajevo basin and its surroundings.

The emergence of water shortages for water supply has caused great attention of citizens and the scientific community, which was the subject of public debates launched by civic associations, in which actively participated the Association of Geographers in Bosnia and Herzegovina, to explain the shortage of water in the water supply infrastructure. Public debates on the subject revealed profound problems concerning water supply of Sarajevo. They are the result of the genesis of the aquifers in the Sarajevo basin; intergranular ones in Quaternary facies and karst fissured ones in the carbonate facies formations of Igman and Bjelasnica. The synergy of hydrological relationships and connections forms the main water reservoirs in the Sarajevo water protection zone from which the water is taken and through the water infrastructure transported to consumers in Sarajevo. Since this is a large basin area, which is anthropogenically usurped, vadose waters can get contaminated and worsen the state of water protection zone. In addition, there are intentions of decrease of the area of water protection zone, which will greatly exacerbate the problems of waters in it.

Keywords: *groundwater, intergranular water, karst, karst water, aquifers, fracture porosity, environmental problems, water supply, sewage, sewerage.*