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ASSESSMENT OF THE HYDROECOLOGICAL CONDITION
OF SURFACE WATER OBJECTS IN THE DEBED RIVER BASIN

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Protection of surface water objects from pollution and consumption currently remains one of the most important geo-ecological issues in the field of environmental protection and river basin development. The purpose of the work is to identify the quality of the water bodies of the discussed area at the given time and in the given location, to assess the effects of the mining industry on water quality. The work studies the features of the hydroecological and their problems in the Debed River Basin, taking into account the impact of mining activities. The Debed is one of the most important rivers in Armenia. Used methods statistical data analysis, hydrological calculations, as well as processing methods, comparison and contrast, geospatial information, ArcGIS, etc. It was found that the main sources of pressure on the waters in the Debed River are metal extraction (dispersed and non-point pollution), point pollution from untreated residential wastewater, agriculture and transport. The results showed that in the Debed River catchment basin, many rivers at multiple sites were polluted with various heavy metals originating from mining activities, which adversely affected macrozoobenthos development and posed risks to human health in areas where the water is used for drinking purposes. The obtained results have important scientific and practical significance; they can be used as a basis for a comprehensive analysis of environmental and economic studies of the current conditions of the Debed River basin.

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