DELINEATION OF GROUNDWATER BODIES THE KURA RIVER BASIN UPPER MINGACHEVIR RESERVOIR DAM IN THE REPUBLIC OF AZERBAIJAN

Rashail İsmayilov

Azerbaijan State Water Resources Agency, Baku, Azerbaijan, AZ1012, Baku, Azerbaijan, 73, Moscow avenue rashail.ismayilov@gmail.com

Azerbaijan is one of the countries with limited water resources. The total water resources of the country are 35.3 km³, of which only 4.4 km³ (12.5%) falls on the share of groundwater. In recent years, to meet the needs of various sectors of the economy, an average of about 12.6 km³ of water has been taken from natural sources, of which 18.8% is groundwater.

There are 18 groundwater basins in Azerbaijan, of which 14 are transboundary. Azerbaijan shares these transboundary basins with Russia, Georgia, Armenia and Iran.

Azerbaijan builds its relations with the neighbouring countries on the basis of through bilateral contracts in line with international judicial principles and all issues are settled respecting such principles accordingly.

According to the UNDP GEF Kura II Project: Advancing Integrated Water Resource Management across the Kura river basin through implementation of the transboundary agreed actions and national plans to be implemented in Azerbaijan and Georgia, in a transboundary groundwater basin located on the territory of Azerbaijan and Georgia, parallel monitoring will be organized, followed by the exchange of information.

European Union Water Initiative Plus for the Eastern Partnership Countries implemented the project "Support in the delineation and characterization of groundwater bodies and the design of a groundwater monitoring network in the Kura upper Mingachevir water reservoir River Basin District in Azerbaijan".

The approach used for delineation of groundwater bodies in the river basins is based on the EU Water Framework Directive and its guidelines. The delineation of bodies of groundwater must ensure that the relevant objectives of the Directive can be achieved. This does not mean that a body of groundwater must be delineated so that it is homogeneous in terms of its natural characteristics, or the concentrations of pollutants or level alterations within it. However, bodies should be delineated in a way that enables an appropriate description of the quantitative and chemical status of groundwater. 8 main hydrogeological units (aquifers) in Kura River basin upper Mingachevir Reservoir Dam Pilot Area have been analysed for groundwater body delineation.

These aquifers have been analysed, their hydrochemical and hydrodynamic characteristics compared, and certain smaller aquifers have been grouped so as to avoid unmanageable subdivision. As a result, bodies of groundwater have been preliminarily identified. pressures are identical for almost all of shallow ground waters in Kura Upstream of Mingachevir Reservoir pilot basin in areas impacted by population and agriculture.

Key words: groundwater basins, delineation of groundwater bodies, status of groundwater.