

## **THE PRINCIPLES OF HYDROGEOLOGICAL STRATIFICATION**

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Hydrogeological stratification means delineation of volumetric hydrogeological bodies in the geological space, structural modeling of the underground hydrosphere within certain spatial and temporal boundaries.

A hydrogeological body is a geological body in its total volume or a part of it distinguished by specific hydrogeological features with the hydrogeodynamic parameters as basic among them that characterize water-exchange and formation of quantity and quality of ground water.

On the basis of integral analysis of: type of rock permeability determining presence or absence of gravitation dripping/liquid water in them; a hydraulic link between adjacent structures; ground-water residence time in the latter, and specific hydrogeodynamic regime, a taxonomic row of hydrogeological divisions have been established, including: the zone of aeration, water-free permeable layer, water-bearing layer (zone), relatively water-bearing layer (zone), relatively water-tight layer, water-tight layer, aquifer complex, water-bearing stage.

The universal principles of hydrogeological stratification enable compilation of sequentially correlated summary legends of hydrogeological maps on different scales.

Regional stratification schemes for summary legends of serial sheets of hydrogeological maps should be compiled taking into consideration structural-hydrogeological and zonal-climatic conditions in regions under study.

The principles were worked out with the participation of V.V.Kurennoy, L.A.Ostrovsky, R.K.Shakhnova, S.L.Pugach, L.V.Leonenko.