REGULARITY OF GROUNDWATER HYDRODYNAMIC REGIME OF URBAN TERRITORIES

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The problem of the analysis of groundwater hydrodynamic regime on urban territories introduces considerable concern in connection with the recently arisen necessity of estimations both forecasts of seasonal and more long-term changes of a groundwater regime within the limits of cities.

The actual problem is to observe the main regularity of a groundwater regime on territories of city on the basis of the available long-term observational data and to give their estimation in matching with background legitimacies.

Oscillation amplitude is one of the main parameters of a groundwater regime. The knowledge and forecasting of its value is necessary for the solution of a great circle of practical problems arising at surveys, designing and exploitation of objects of urban and industrial building.

A stratification depth of groundwater (power of a zone of aeration) exerts the main influence on value of seasonal and long-term changes. For natural conditions the general regularity of amplitude oscillation change with increase of aeration zone power is rather steady.

The seasonal oscillations of heads practically everywhere do not exceed one meter. It is important that for the disturbed groundwater regime the effect of stratification depth on value of seasonal oscillation amplitude disappears. The effect of oscillation reduction is specially swept up in an interval of depths from 2 to 6 meters, i.e. there, where the amplitudes usually reach maximum ratings.