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COEFFICIENT OF ROUGHNESS OF RIVER BADS

Abstract: This article provides a brief summary of the research conducted on the study and application of the turbidity coefficient in the river bed.

Key words: river, stream, river, rapidity, empirical formula, scale, resistance coefficient.

A. M. Mukhamedov, A.A. Church, V.F. Talmaz, V.S. Altunin, N.I. Zudin, H.A. Conducted by Ismagilov, T.Juraev and others. Their methods are put into practice.

Under the conditions of river water flow regulation, under the influence of hydrotechnical structures, the river bed is reshaped with new hydraulic flow parameters.

The new hydraulic parameters require certain adjustments to the already existing calculated dependencies for regulated river flow conditions. The purpose of this research is to achieve the above mentioned objectives.

It is known that the roughness coefficient is related to the Shezi speed multiplier. Among the proposed empirical formulas for calculating the shear speed coefficient, there is a parameter "n", which is conventionally called the roughness coefficient. Its value is usually determined according to the characteristics of the channel according to the roughness coefficient scales. It should be noted that currently accepted scales of roughness coefficients should be considered indicative for both artificial channels and natural water flows.

For example, according to the scale of Horton or King, for the same characteristics of even the most regular and smooth channel surfaces, depending on the condition of the relief surfaces, four values of the roughness coefficient are given: "very good", "good", "normal" and "bad".

To determine it, there are many empirical formulas that take into account the hydraulic properties of the flow and the size of the channel deposits, along with the scales of roughness coefficients. These formulas are mainly intended to determine the roughness coefficient of mountain and sub-mountain sections of rivers.

In addition, there are currently about 20 published tables for determining coefficients of turbulence. However, more than half of them are designed for calculating flows in various artificial structures (pipes, pipes, canals, etc.) and are not used for calculating flows in river channels. To count the latter, there are currently only 4-5, M.F. Sribnov, Karaseva, J. Bradley, V.T. Chow and G.W. Zheleznyakov table is used.

All variations of roughness coefficients are divided into reinforced and unreinforced channel coefficients. In turn, it is necessary to distinguish between the coefficients of artificial unreinforced channels (soil channels) and channels of natural water flows (rivers). It should be remembered that channels with unreinforced channels can, under certain conditions, be shaped like rivers. Writing channels according to roughness coefficients is one of the possible hydraulic classifications of water flows based mainly on the resistance to fluid movement.

The results of studies with important engineering applications are usually presented in the form of tables containing the quality description of the surface and the corresponding value of the roughness coefficient according to QMQ 11-52-74, and this value is small for unlined channels. within the limits $n = 0.025 - 0.2$. differ.

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