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**Spring river runoff in the European part of Russia: main factors and their estimation.**

**I. Review of previous studies** / Varentsova N.A., Kireeva M.B., Kharlamov M.A., Varentsov M.И., Frolova N.L., Povalishnikova E.S. // Hydrometeorological Research and Forecasting, 2022, no. 2 (384), pp. 92-116.

The review of the papers dealing with the river runoff formation is presented. The factors of the spring flood formation are typified. The groups of direct and indirect, dynamic and quasi-permanent, as well as anthropogenic factors are distinguished. The authors constructed a summary scheme of the spring flood formation factors, taking into account the peculiarities of their influence on water runoff, analyzed the role of each significant factor in the formation of spring floods, and presented their quantitative estimates. It was hypothesized that the concept of the dominant role of incoming components in the spring flood runoff formation has currently lost its relevance. Modern approaches to the calculation of the main factors of the spring flood runoff formation are considered.

*Keywords:* spring flood, climate change, snowpack, water equivalent, snow cover, soil moisture, freezing depth

Fig. 3. Ref. 57.