RESEARCH OF TECHNOLOGIES OF GEODESIC MONITORING OF BOTTOM DEFORMATIONS IN THE AREA OF LOCATION OF UNDERWATER TRANSITIONS OF MAIN PIPELINES

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It is noted that as a result of the interaction of the geodynamic complex of the river with the environment, changes in the channel appear, which entail planned and high-altitude deformations of the water artery. Therefore, in the construction and operation of engineering structures, they must be taken into account. The study of channel deformations, mostly high-altitude, in the areas of construction or the location of existing structures is a very urgent task to ensure their stable, trouble-free operation. It is established that for the study of channel deformations, two of the most common technologies are used. The first is the technology of combining plans for channel surveys, and the second is the combination of transverse profiles of the river using hydraulic rams fixed by signs on the shore. The results of a study of the technology for determining channel deformations during their geodetic monitoring are presented. The accuracy of the image of the underwater relief on the plans is estimated. The influence of the errors of combining plans on the accuracy of determining quantitative strain gauges is investigated.

Key words: geodetic monitoring, channel deformations, bottom deformations, channel survey plans, geodetic points, accuracy assessment.

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