Assessment of the Hydrological Regime of the Dzirula River and its Water Management

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According to the current trends in the use of water resources in Georgia, the quantity and quality of water is an important component for the sustainable development of the country. According to European experience, planning the use of water resources is much more effective at the level of basin management. In this case, it is possible to use the water resource not only for energy but also for complex purposes.

For effective management of water resources we have evaluated the hydrological regime of the river Dzirula. In particular, average annual discharge, intra-annual distribution of Water runoff, maximum and minimum discharge, solid sediments, etc. are discussed. The traditional methodology adopted in hydrology is used in calculation and the values obtained by different methods are compared. The results are quite representative. Water resources are also evaluated for individual sub-basins of rivers. The volume of runoff in the basin obtained as a result of analysis of quantitative characteristics of river Dzirula water in case of pool management is quite sufficient to fully supply different types of water users.