

Assessment of hydrological regime of the river and flooding areas with the usage of modern Informational technologies (based on the example of the river Gudjaretistskali).

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Most of the natural disasters in Georgia come from Hydrological events such as flood and flashfloods. However, for mitigation country has done lot of works and research, but problem is not resolved yet. In parallel of the study of the hydrological regime of the rivers, the research methodology of the hydrology was improved. Today, due to modern technical equipment and software we have big opportunity to recalculate hydrological data and them with the appropriate format for the public. Especially, when software used by modern hydrology is developing very rapidly.

The aims of the master's thesis are to study hydrological regime and modern situation in river valley. As well as maximum discharge, flood, flashflood, flooding area and impacted territory. During this research, there was used modern software programs and technologies such as MIKE 11, ArcGIS, HEC-HMS, GPS etc.

In the master thesis is presented that hydraulic modeling of maximum discharge, impacted territory due to flood and flashflood, high-risk territory in the river Gudjaretistskali valley.