World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:14, No:08, 2020

Assessment of the Effectiveness of the Anti-Debris Flow Engineering Constructed to Reduce the Risk of Expected Debris Flow in the River Mletiskhevi by Computer Program RAMMS

Authors: Sopio Gogilava, Goga Chakhaia, Levan Tsulukidze, Zurab Laoshvili, Irina Khubulava, Shalva Bosikashvili, Teimuraz Gugushvili

Abstract : Geoinformatics systems (GIS) integrated computer program RAMMS is widely used for forecasting debris flows and accordingly for the determination of anticipating risks with 85% accuracy. In view of the above, the work introduces new capabilities of the computer program RAMMS, which evaluates the effectiveness of anti-debris flow engineering construction, namely: the possibility of decreasing the expected velocity, kinetic energy, and output cone volume in the Mletiskhevi River. As a result of research has been determined that the anti-debris flow engineering construction designed to reduce the expected debris flow risk in the Mletiskhevi River is an effective environmental protection technology, that's why its introduction is promising.

Keywords: construction, debris flow, geoinformatics systems, program RAMMS

Conference Title: ICEEET 2020: International Conference on Ecological Engineering and Environmental Technology

Conference Location : New York, United States

Conference Dates: August 10-11, 2020