

عنوان مقاله:

(Zoning flooding by using GIS (Case Study: Marjan and Khosban basins, Alborz province

محل انتشار:

دومین کنفرانس بین المللی مخاطرات محیطی (سال: 1392)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Mahsa Mirdashtvan - M.Sc. student, Department of Arid and Mountainous Regions Reclamation, University of Tehran

Fariba Ebrahimi Azarkharan - M.Sc. student, Department of Arid and Mountainous Regions Reclamation, University of Tehran

Alireza Moghaddam Nia - Associated Prof., Department of Arid and Mountainous Regions Reclamation, University of Tehran

خلاصه مقاله:

Development of remote sensing techniques in various fields of management has provided the access to a large amounts of data in different fields of natural hazards management. Environmental planning and risk management are the cases that are done very well by the application of Geographical Information Systems (GIS). The damage caused by natural disasters such as floods has increased in recent years in Iran. In this paper, the effects of geomorphologic features on flooding were studied and compared by the comparison of the variables effectiveness in basin, in Marjan and Khosban sub-basins of Taleghan basin in Alborz province. For this purpose, morphometric features of these two sub-basins include: area, watershed length, form factor, Elongation factor, main channel slope and time of concentration were studied, quantified and analyzed by Arc-GIS. The results show that the runoff height in Khosban sub-basin is more than Marjan's and it is more productive about peak discharge and runoff volume, structural measures therefore set in this area should be more resistant. On the contrary, the reaction rate of runoff and flooding in Marjan sub-basin is shorter in duration. So it is necessary to do more investigations on effective parameters on flooding and flood-prone areas and the main factor that can make the greatest impact on flooding should be identified and management actions need to be taken.

کلمات کلیدی:

Flooding; GIS; Khosban and Marjan basins; Peak discharge; Runoff

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/307482>

