

Abstract

Assessment performance and operation of the watershed management operation, for find weakness and strength points of the actions strategy and effectiveness amount them to intended access to executive actions and better management, the inevitability point at Watershed management is. At this research with target the assessment of the watershed proceedings impact on output flood hydrograph and estimate hydrographs with the different return period, the Narab watershed area selection and investigate. This watershed area that by asphalted road the Jiroft city - Jiroft dam is, then distance 13 km asphalted way by one earthen road to side right and to length 21 km to border Narab area arrives. For performance this research beginning the area foundation information contains land science topography maps, user land, showers statistics and area floodwater information from 1381 to 1393 and also the watershed proceedings details performance by linked reference getting. Then by using of ability of Arc GIS elevation floors map, user land slope, topology and position of the rain survey station and hydrometer procurement. Real conditions at Narab area with soft applications HEC- HMS modeling that with attention to three showery events calibrated. Statistics parameters of the determination coefficient, the relative error and the Nash Sutcliffe coefficient for floodwater volume and Floodwater top showed above accuracy of the model is. Results showed that floodwater top Debi and current volume at streams of dated 1390/11/12, 1392/1/18, 1392/9/17 and 1393/1/18 to respectively (29/3, 58/1), (40/95, 58/08), (55/55, 63/15) and (46/15, 74/1) percent under effects of the watershed proceedings decreased. And results obtain of the floodwater top Debi with the return period 5, 10, 20 and 50 years to respectively, (29/91, 46/15, 58/54, 67/94), (23/07, 40/82, 54/48, 64/94), (9/09, 30/9, 50/09, 67/27), (23/14, 45/14, 64/42, 77/14), are and this results showed that with increase of the flood return period the role of watershed proceedings in the Narab watershed area in Kerman city effective and floodwater top Debi will have got more decrease.

Key word: watershed actions, flood hydrography, HEC- HMS, the return period, watershed Narab



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*The Thesis Submitted for the Degree of M.Sc
(In the Field of Watershed Group)*

*Syl–Hay hydrograph of watershed management
activities impact on output with different return
periods HEC- HMS model in Narab (province)*

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December 2017