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Morphometry of Ahar Chay Meanders at Ozomdel Plain of Varzegan and Geomorphologic Impacts of Overflow

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Abstract

Fluvial forms are important subjects in geomorphology. With regards to energy in water flow, rivers can be considered as important morphogenetic factors. Rivers flow in different states on the earth surface. Overflowing of rivers causes geomorphologic features in bed, course and floodplain. The following items are studied in this research: 1) estimating maximum discharge in some sections of meanders, 2) forms of beds 3) forms of overflowed lands 4) features on the courses of river because of overflowing. Cutting, side erosion, and sedimentation after overflowing are most important problems which take place in meanders. Moreover of field studies and morphometries of channels in the laboratory aerial photos, geologic maps (S. 1:100000), topographic maps (S. 1:250000) of the studying region through software

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such as ArcView, AutoCAD and Excel which are used for pursuing these aims. The results have shown that most of the cutting activities and channel changes are related to large periodical floods.

Keywords: Morphometry, Geomorphology, Erosion, Overflow, Meander, Ozomdel Plain.