



Environmental status of Central Asian braided rivers

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Braided rivers have been intensively analyzed mostly by geomorphologists. In the present study the approach to recognize braided channel types and effects with the special emphasis on flow partitioning have been applied. It is assumed that each braided channel represent the reach which is initiated with dividing of the single channel and completed below the confluence of the total multiplicity of channels. Proposed indices of braided channel structure and water discharges ratio which have been proposed and applied to 150 braided reaches of 40 rivers of Russia, China, USA enable to describe origin and types of the observed rivers and further analyze hydrological effects of braided channels. The latter represent physical, hydrochemical and ecological conditions of stream along braided reaches caused by flow distribution among branches in relation to braiding intensity. Structure and braided channel patterns types impacts on hydraulics, sediment transport, water temperatures, stream communities are of primary interest in the present study.