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Title: *Geoecological functions of the Arctic river systems*

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This paper outlines general functions with which to interpret river evolution, behaviour and character in the Arctic systems. On the basis of different river schemes presented by various authors, hierarchical, functional and systematic divisions of river patterns are analysed within drainage basin. Drainage basin or river catchment as holistic system is fundamental assumption of this undertaken analysis. The fluvial system presented by Schumm (1977) is an input to this analysis. Next several river schemes which have various analytical assumptions: geological, geomorphic, morphometric, hydrological, denudational, glaciological, sedimentological, ecological, botanical etc are adjusted. After examination of these different visions, useful features of each scheme are adopted to a model of the Arctic river system. Adopted analysis is based on four steps of reading the landscape (Fryirs & Brierley 2012), in this case of fluvial and slope landscapes in glacial, proglacial, periglacial and paraglacial terms. Geoecological functions for the Arctic river systems are presented as an effect of analysis. These functions are divided for glaciated and unglaciated catchments. Distinguished functions described successive geoecological zones in the Arctic catchments.

Fryirs K.A. & Brierley G.J., 2012. *Geomorphic Analysis of River Systems: An Approach to Reading the Landscape*. John Wiley & Sons, Chichester.

Schumm S.A., 1977. *The fluvial system*. John Wiley & Sons, Chichester and New York.