

# Ecological Assessment of the Upper Stretch of the Iskar River Based on Selected Biological Parameters in Conformity with the Water Frame Directive 2000/60/EU

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**Abstract:** Five sites from the upper part of the Iskar River watershed (from the inflow of the Beli Iskar and Cherni Iskar rivers to Iskar Dam) were investigated during the 4 seasons of 2004. Totally 166 taxons (94 at species and 44 at generic taxonomic level) from 18 basic benthic invertebrate groups were found as a result of the study. The species *Hydropsyche incognita* is reported for the first time for the Bulgarian Danube tributaries, and other 14 species and 2 families - for the Iskar River. The river ecological status was assessed by means of a complex of parameters, characterizing the composition and structure of the macrozoobenthic coenoses, saprobic and biotic indices.

The cases when the ecological status was very good or good prevailed were studied. An insignificant change for the worse was observed in the periods of low or high water. The increased organic content as a result of anthropogenic impact has led to the acceleration of the natural successive changes of the river ecosystem in the section downstream the town of Samokov – upstream the Iskar Dam, by changing from oligosaprobity into  $\beta$  – mesosaprobity.

**Keywords:** Iskar River, macrozoobenthos, saprobity, WFD, EQR