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EXPANDING THE SET OF PARAMETERS FOR THE WQI CALCULATION BASED ON CORRELATION COEFFICIENTS

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Abstract: The quality of the water in the Danube River pre-deltaic area depends on the nature and extent of anthropogenic activities. In some of our previous studies we presented the main pollutant factors which action and affect the water quality. The intense anthropogenic activities in the river basins and the reduction of the river spills due to the drought causes multiple increase of the organic and inorganic pollution load of the surface water bodies in Romania. From this point of view, the Water Quality Index is an important factor in the assessment of the surface water quality. In this paper we present a method meant to extend the set of parameters for WQI evaluation using correlation coefficients. The proof of our theorem is featured by a case study to highlight the procedure used.

Keywords: WQI, statistical approach, correlation.

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