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VARIOUS METHODS FOR CALCULATING WATER QUALITY INDEX

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Abstract: At present, the most commonly used method to evaluate the quality of a water stream is the application of the Water Quality Index, which may be determined by using different methods. The main purpose of this study is to describe four methods for calculating Water Quality Index with their advantages and disadvantages: NFS-WQI (National Sanitation Foundation-Water Quality Index), OWQI (Oregon Water Quality Index), WAWQI (Weighted Arithmetic Water Quality Index) and CCME-WQI (Canadian Council of Ministers of the Environment -Water Quality Index). Choosing one of the four methods mentioned above should be based on the study purpose and the nature of the water stream. These indices have already been used to determine the quality of the Danube water in the all the riverain states. Moreover, the present research reveals that two methods are proved to be useful in determining the Danube water quality, namely: WAWQI (Weighted Arithmetic Water Quality Index) and CCME-WQI (Canadian Council of Ministers of the Environment -Water Quality Index).

Keywords: Water Quality Index, NFS-WQI, OWQI, WAWQI, CCME-WQI, Danube.

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