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ICEEM/02 - ENVIRONMENTAL MANAGEMENT AND SUSTAINABLE DEVELOPMENT SECTION "Environmental Integrated Management"

THE SURFACE WATER QUALITY ASSESSMENT

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Abstract

The work proposes a new water quality assessment procedure: the pollution index techique. This is calculated for all the monitoring cross-sections of the rivers from the Prut and Barlad river basins. The assessment is effectuated by comparison with the classic one and it demonstrates the advantages of this new method.

Keywords: concentration, class mark, pattern, pollution index, risk evaluation

1. The pollution index

The present methods and techniques of water quality assessment (Macoveanu, 2002, HG, Normative, 2002) include a certain degree of subjectivity of the decision. The pollution index technique (Nicu, 2003) represents a scientific and objective evaluation. It confers credibility to the water assessment in the general balance of the environmental evaluation. In the same time, the use of new defining techniques of evaluation in "the water quality state" represents an objective request (Directive 2000/60; Timur, 1999) because water is a vulnerable ecosystem, continuously under the pressure of the increasing demand of high quality water.

The pollution index technique is based on the fundamental principles of the environmental impact evaluation (Macoveanu, 1991; Nicu, 2003). The suggested method, which is used in this work, follows two steps: finding the class marks and then the pollution indexes. Both can be achieved using certain patterns.

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