Environmental Engineering and Management Journal *April 2013, Vol.12, No. 4, 671-676*
http://omicron.ch.tuiasi.ro/EEMJ/

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MODELING THE IMPACTS OF HUMAN ACTIVITIES ON WATER QUALITY OF JIJIA RIVER

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Abstract

Quality of water bodies is influenced by their ability to self-clean and disperse the existing substances in water originating from natural or anthropogenic sources. Creating mathematical models, using design software and simulation, in terms of surface water quality monitoring, are standard design and interpretation of studies necessary for rational management of water resources. And we must respect the concept of "sustainable development". In this paper we highlight this by modeling data (terrain, hydrological, hydraulic, climatic, lithologic, chemical, biochemical) to a stream using Danish software MIKE 11. Knowing the main point pollution sources and quantities of pollutants are generated simulation was performed at different values of flow and water velocity, being noticed changes in terms of water quality, evolution and dispersal capabilities river receiving as effluent from the activities of the people. Using this method of mathematical analysis leads to results that can be used in a sustainable management of water courses.

Key words: anthropogenic pollutants, dispersion, Mike11, monitoring, water quality

Received: December, 2012; Revised final: April, 2013; Accepted: April, 2013

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