NEW PERSPECTIVES IN THE MANAGEMENT OF WATER RESOURCES. THE CASE OF TRANSBOUNDARY HYDROLOGICAL BASIN OF STRYMONAS / STRUMA RIVER BETWEEN GREECE AND BULGARIA

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ABSTRACT

It is inconceivable to talk about the history of human civilization without talking about water. Water is a mean of subsistence and communication, a factor of technological development as well as symbol in ritual. According to Pindar from Thebes, the best watered of all classical cities, water, an all-pervading substance on the Earth, is the best thing all. Thales of Miletus (624 – 548 BC) retained water as the central principle, or "element", of his cosmology. His successors Empedocles and Aristotle although added other primal "elements" – fire, earth and air, water represented the qualities of liquidity, mobility, wetness and coldness.

Progress in the development of knowledge has leaded to the undertaken of different paths and approaches in the study of water movement. Each of these various approaches fits a specific branch of science. In this paper a brief outline of the different meanings of the term water in a scientific context is given. Also the identification of the space and time scales employed for the description of the movement of surface and ground water, is tried, parallel with the new trends and directions in the development of the managerial perspectives in the study of water. A case study will be presented concerning the trounsboundary hydrological basin of Strymonas / Struma river between Greece and Bulgaria to describe the new perspectives that remote sensing techniques offer to the understanding of hydrological problems.

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