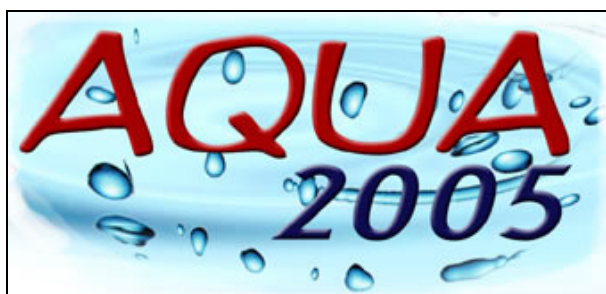


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**REAL TIME MONITORING AND WARNING SYSTEM FOR
WATER QUALITY PARAMETERS IN EVROTAS RIVER,
LACONIA PREFECTURE (GREECE)**

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ABSTRACT

A principal guideline of the 2000/60 Directive of the European Parliament for the water resources management on a river basin area and of the law 3199/2003 of the Greek Parliament for the implementation of the Directive, is the uniform and continuous monitoring and representation of all water bodies (surface, groundwater, etc) for the whole territory. Among the physical, chemical, biological and ecological parameters that should be monitored in appropriate frequency, there are some that can be monitored in real time, and they are indicative of a general status of water quality at any time (pH, conductivity, temperature, dissolved oxygen and turbidity). Technology permits the transmission and retrieval of data from any location. At the same time, there are sensitive areas where falloff of surface water quality has occurred due to fixed sources of pollution, or a number of non-fixed single incidents of pollution. In such cases, real time monitoring can help in taking preventive or suppressive measures, expanding from a simple data collection system to a warning system, by setting the acceptable value limits for each measured parameter, in the appropriate customized software. These characteristics were identified in the Evrotas river basin, thus leading to the cooperation of the University of Athens with the Local Union of Municipalities and Communes of Laconia Prefecture (Greece) for the installation of a real time monitoring network and warning system for a number of locations on the river as well as some other selected points. The selection of parameters and sites was made according to the international experience and taking into account the local characteristics (geomorphology, geology, flow conditions, weather, pollution sources, etc), as well as the local authorities' opinion and knowledge of the area. The system has been operational since July 2004.

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