

## FC-MWS: A SOFTWARE ENVIRONMENT FOR FLOOD OPERATION IN MULTIRESERVOIR SYSTEMS

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### A b s t r a c t

This paper describes an open architecture software package Flood Control – Multireservoir Water System (FC-MWS), developed as an environment for computer-based analysis and design of control structures and mechanisms for flood operation in multireservoir systems. The program is addressed mainly to control system developers and should provide assistance in their search for satisfactory process operation. In general, it can be used to perform experiments for various water systems with reservoirs located serially or in parallel. FC-MWS can operate as a real-time decision support tool for control center of a multireservoir water system too. A case study of the upper Vistula river basin system in the southern part of Poland is presented in the final part of the paper.

**Key words:** flood control, software systems, computer-aided engineering, Vistula river basin, flow transformation model.