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# CONCEPTUAL MODELING FOR MANAGEMENT OF THE CITARUM/CILIWUNG BASINS, INDONESIA

#### Y.R. Fares

Department of Civil Engineering, University of Surrey, Guildford, United Kingdom

#### M. Ikhwan

Centre for Environmental and Water Engineering Research, Civil Engineering Department, Faculty of Engineering, Kampus Baru University of Indonesia, Depok, Indonesia

#### **ABSTRACT**

Problems relating to the unsatisfactory state of water supply and quality within the Citarum/Ciliwung catchment that feeds directly to the city of Jakarta are reported. The various complex mechanisms of waterways are analyzed, along with the dispersion processes that affect pollutant discharges, with emphasis on iron and manganese. The analysis is carried out by developing a conceptual model for the watershed, upstream of the intake at Buaran Water Treatment Plant that feeds the eastern part of Jakarta. Within the conceptual model, a

deterministic (numerical) model for simulating the hydraulic and dispersion components within the Citarum catchment that feeds the treatment works through the West Tarum Canal will be developed. The use of the model should, in the long run, provide a valuable tool for testing different cost-effective water supply management strategies.

Reference: Fares, Y.R. and M. Ikhwan; Conceptual Modeling for Management of the Citarum/Ciliwung Basins, Indonesia, Journal of Environmental Hydrology, Vol. 9, Paper 10, May 2001.

### **CONTACT:**

Dr. Y.R. Fares
Department of Civil Engineering
University of Surrey
Guildford GU2 7XH
United Kingdom

E-mail:Y.Fares@surrey.ac.uk



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