

Applying the virtual water concept at regional level – The cases of the Prefectures of Xanthi and Rhodope, Greece

N. Kotsovinos, M. Gratziou, M. Tsalkatidou*

Department of Civil Engineering, Democritus University of Thrace, 67100 Xanthi, Greece

Tel. +30 2310 813719; Fax +30 2541079604; email: kotsovin@civil.duth.gr, mgratzi@civil.duth.gr, mtsalkat@civil.duth.gr

Received 19 January 2010; Accepted in revised form 30 November 2010

ABSTRACT

Virtual Water is a recently introduced and widely recognized concept that is considered important for attaining regional and global water security. It refers to the water needed for the production of an agricultural or industrial product and it is contained in the product not in real but in virtual sense. The practical importance of the virtual water concept is mainly twofold, as virtual water trade can act as a tool to achieve water security and efficient water use, while water footprints can act as links between consumption patterns and the impacts on water. This paper applies the virtual water concept at regional level using the Prefectures of Xanthi and Rhodope as case studies. The ensuing results are juxtaposed and commented.

Keywords: Virtual water; Water footprint; Xanthi; Rhodope

* Corresponding author.