



Flow status of three transboundary rivers in Northern Greece as a tool for hydro-diplomacy

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The aim of this paper is to examine how the river flow monitoring consists a tool for hydro-diplomacy. Management of transboundary catchments and the demand of common water resources, often comprise the cause of conflicts and tension threatening the peaceful coexistence of nations. The Water Framework Directive 2000/60/EU sets a base for water management contributing to common approaches, common goals, common principles as well as providing new definitions and measures for Europe's water resources.

In northern Greece the main renewable resources are "imported" (over 25% of its water reserves) and for this reason the implementation of continuous flow measurements throughout the year is necessary, even though difficult to achieve. This paper focuses on the three largest transboundary rivers in Northern Greece. Axios and Strymonas river flow across the region of Central Macedonia in Northern Greece. Axios flows from FYROM to Greece, and Strymonas from Bulgaria to Greece. Nestos river flows from Bulgaria to Greece. The Greek part is in the region of Eastern Macedonia and Thrace in Northern Greece. Significant productive agricultural areas around these rivers are irrigated from them so they are very important for the local society.

Measurements of the river flow velocity and the flow depth have been made at bridges. The frequency of the measurements is roughly monthly, because it is expected a significant change in the depth flow and discharge. A series of continuously flow measurements were performed during 2013 and 2014 using flowmeters (Valeport and OTT type). The cross-section characteristics, the river flow velocity of segments and the mean water flow velocity and discharge total profile were measured and calculated respectively.

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