

RECENT ADVANCES IN TRANSBOUNDARY GROUNDWATER MANAGEMENT IN THE BALKANS

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ABSTRACT

Transboundary aquifer resources play a major role in SEE as sources of freshwater. 65 Transboundary Aquifers (TA) were identified in the region in an inventory developed in 2007 by the UNESCO Chair and International Network of Water/Environment Centres for the Balkans (INWEB)* at the Aristotle University of Thessaloniki, in cooperation with the Economic Commission for Europe (UNECE).

Two main types of TA were distinguished:

- (1) karst aquifers ranging from a few tens to hundreds of square kilometres, which generate major karstic springs and
- (2) alluvial aquifers with greater areal extend, up to some thousands of square kilometres.

In some countries transboundary karstic groundwater covers between 60 and 100% of total water use (e.g. in countries located in the Dinaric region), while for transboundary alluvial groundwater the proportion varies from 15 to 70% (e.g. along the river Danube).

TA in SEE, and especially those which are karstic, are highly vulnerable to pollution from different pressure factors (agriculture, industry, mining, sewage/waste disposal and tourism).

UNESCO/IHP in cooperation with the Global Environmental Facility (GEF) plans to implement cooperative activities in order to demonstrate how effective cooperation between countries and multidisciplinary methodological approaches may reduce groundwater and ecosystem vulnerabilities and contribute to sustainable transboundary groundwater management.

* UNESCO/INWEB, 2007: <http://www.inweb.gr>