

# **HYDRODIPLOMACY, A NEW PERSPECTIVE IN SHARED WATER RESOURCES IN GREECE**

**Y. Mylopoulos, E.Kolokytha**

**Aristotle University of Thessaloniki**

**Faculty of Civil Engineering**

**Division of Hydraulics & Environmental Engineering**

## **Abstract**

On a global scale, the importance of transboundary water resources is far from negligible: according to reports submitted to the UN, about 50% of the land on Earth (excluding Antarctica) is located in internationally shared water catchments. About 40% of the world's population lives in this area, which extends over more than 200 international river basins.

Transboundary water management is one of the most important universal problems in the area of environmental protection and sustainable development. Even though the aspect of transboundary water management have been in the focus of interest of many scientists, institutions, national and international programs for many years, the issue of integrated transboundary water management is not satisfactorily solved even in the countries of European Community, with highly developed and efficient administration.

It is essential to recognize that a global environmental policy demands efficient ways of international cooperation, which must take into account both environmental problems and the complexities of world social conditions and economy.

Cooperation and conflict are, expressions of the same quest for improving effective planning and management, for promoting new ways for sustainable development, and for accommodating the complexities of shared water resources.

These complexities include the "downstream responsibilities" of the water of one state which flows into another. Second, the "upstream responsibilities" of states whose activities may extend upstream and affect another state. And,

finally, "cross-stream responsibilities" of countries whose common border is formed by a river, or even when they share underground reserves.

Environmental diplomacy namely the formulation of the international relations for the management of the "common goods" and the confrontation of global environmental problems forms today a new reality giving thus the opportunity of international cooperation for the protection of the environment and the preservation of international peace.

Environmental diplomacy in the case of water leads to the new scientific field known as "hydrodiplomacy". The management of the water resources shared by two or more countries and the exploitation of available water resources has led to potential conflicts threatening the stability and the peaceful coexistence of the boundary countries. This is the reason why the water management has incorporated methodologies and principles from the science of International relations and Diplomacy developing thus "hydrodiplomacy".

Improve efforts towards the utilization of "hydrodiplomacy" in terms of understanding alternative dispute resolution and conflict management efforts to transboundary water resources on the one hand and recognize again the river basin approach as a cooperative mechanism and authority on the other, would give considerable solutions to the difficult problems of shared water resources.

In N. Greece there are four transboundary rivers, which originate from FYROM and Bulgaria (Axios, Strymonas, Nestos, Evros) and two transboundary lakes: Prespa and Doirani lake. This paper examines the case of three transboundary rivers in N. Greece, (Axios, , Nestos, Evros) and transboundary Prespa lakes as well.

The major problems encountered concern co-operation of neighbour countries in relation to information exchange which fails to set the background conditions for future development of common water management plans in a river basin scale. Furthermore, administrative shortcomings provoke a lot of problems. There are many ministries, institutions and organizations both governmental and non-governmental involved in water resources management. Each of them has its own goals and objectives and concentrates specifically on one or more aspects of water resources

management, ignoring in the process some other fundamental issues. “Internal water problems”, in the Greek part of the transboundary basin also impede integrated approaches. Insufficient data and lack of monitoring systems creates significant problems in the evaluation of current water conditions in the river basins.

Shared water resources of North Greece constitute a major asset for the country and introduce high uncertainty for the country's imported water due to the lack of integrated approach, administrative deficiencies and not efficient transboundary legal agreements. Co-operation took mostly place through fragmented measures, ignorance of the local needs, giving emphasis on securing users' rights rather than treating transboundary rivers as a unity which should be jointly protected and managed.

This paper first illustrates the current situation concerning transboundary water management in Greece. Second provides a framework for the improvement of the current conditions towards integrated water resources management of shared river basins.