

**“Putting HYDRODIPLOMACY in  
practice:  
The Transboundary Water Resources  
case study in GREECE”**

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# TRANSBOUNDARY WATER RESOURCES

- The political dimension of water becomes highly important
- 40% of the world's population live in transboundary catchment areas, shared by more than one country
- Need for concerted management and harmonization of policies

# THE DIFFICULTIES OF TRANSBOUNDARY WATER MANAGEMENT

- Relationships of power, position and interest
- Territorial jurisdictional and ownership disputes
- Political and ideological rivalries and geopolitical setting
- Absence of effective institutional legal machinery for settling riparian disputes
- Deeply rooted cultural and social attitudes toward water that make change difficult (hydroculture)

# TRANSBOUNDARY WATER RESOURCES

- Sustainable Development introduced the need for the Green, or Environmental Diplomacy
- Principles of "Hydrodiplomacy"
- Need for Conflict Resolution Methods

# ENVIRONMENTAL DIPLOMACY

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.

# HYDRODIPLOMACY

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.

# BASIC PRINCIPLES OF SUSTAINABILITY USED IN HYDRODIPLOMACY

➤ Effectiveness

➤ Efficiency

➤ Equity

# EFFECTIVENESS

Integrated river basin approach, as a part of a national strategy for water resources management



Incorporates qualitative and quantitative aspects of water by developing transboundary monitoring mechanisms, for controlling and assessing the different water parameters



Promotes common water resources development plans through integrated designing of water projects.



# EFFICIENCY

Implementation of a series of economic instruments, and rules for:



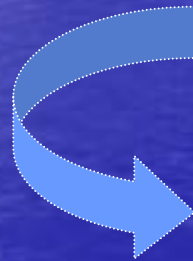
distribution of costs  
rehabilitation, protection  
and preservation of common  
water deposits.



Common funding  
of hydraulic projects

# EQUITY, EQUALITY

Adoption of rules and measures for the  
fair access to common water resources



the best exploitation and management  
of common water resources

# TYPES OF COOPERATION AND BENEFITS ON INTERNATIONAL RIVERS

1. THE ECOLOGICAL RIVER  
Increasing benefits "to the river"
2. THE ECONOMIC RIVER  
Increasing benefits "from the river"
3. THE POLITICAL RIVER  
Benefits and Costs arising  
"because of the river"
4. THE CATALYTIC RIVER  
Increasing benefits "beyond the river"

## FIVE MAJOR LEGAL PRINCIPLES THAT ARE SHAPING AND WILL FURTHER AFFECT THE PRACTICE OF "HYDRODIPLOMACY"

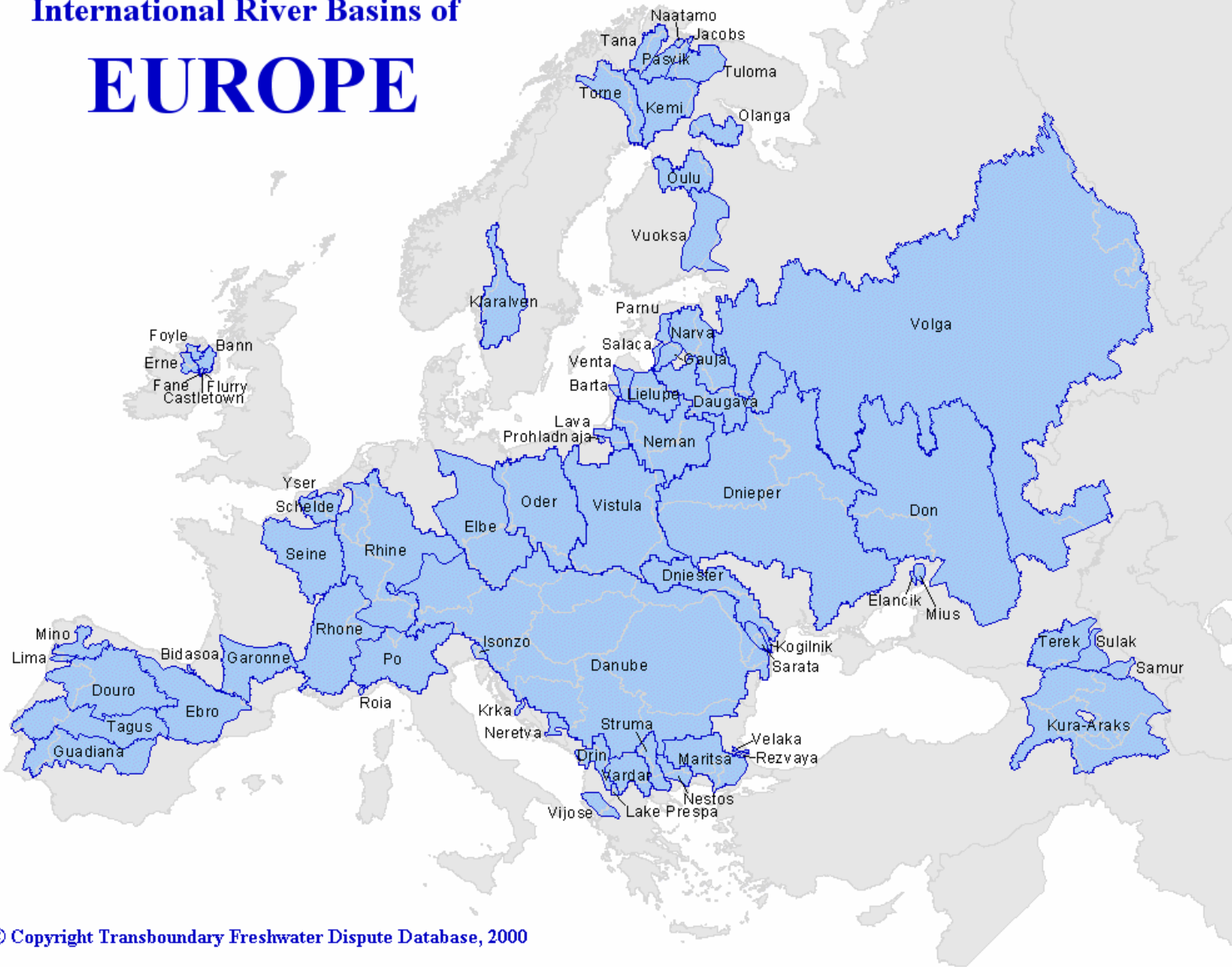
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1. The Principle of international water and the concept of an international "watercourse;"
2. The Principle of reasonable and equitable utilization, a principle that has generated interminable debates and interpretations as to "reasonableness" and "equity;"
3. Obligation not to cause significant harm and the exercise of due diligence in the utilization of an international watercourse;
4. The Principle of notification and negotiations on planned measures; and
5. The Duty to cooperate, including regular exchanges of data.

# LEGAL FRAMEWORK

- 1992: UNECE Convention, "The Protection and Use of Transboundary Watercourses and International Lakes"
- 1997: UN Convention, "Convention on the Law of the Non-navigational Uses of International Watercourses"
- 2000: Directive 2000/60 of the European Parliament and of the Council of 23 October 2000, establishing a framework for Community action in the field of water policy, "Water Framework Directive"

# International River Basins of **EUROPE**



# TRANSBOUNDARY WATER MANAGEMENT ACCORDING TO THE WFD

- River Basin Management and Integrated Water Management are introduced, not only for the EU countries, but also for the countries having boundaries with them
- A common framework is provided between neighbor countries, for the co-operation, planning and management of water resources

# Water & Balkans





# TRANSBOUNDARY WATER MANAGEMENT IN GREECE

- Major issue for Greece
- Downstream country in 4 out of the 5 shared rivers
- 25% of the country's renewable resources are imported
- The management policy of the upstream countries affects directly the development and the environmental protection downstream

# EUROPEAN PROJECTS



[www.ironcurtainproject.com](http://www.ironcurtainproject.com)

**IRON CURTAIN**  
**2001-2004**

5th Framework Programme "Quality of Life and Management of Living Resources"

Key Action 5 "Sustainable Agriculture, fisheries and forestry and integrated development of rural areas including mountain areas"



[www.transcat-project.net](http://www.transcat-project.net)

**TRANSCAT**  
**2003-2006**

5th Framework Programme "Energy, Environment and Sustainable Development"

Key Action 1 "Sustainable Management and Quality of Water"



## THE IRON CURTAIN PROJECT

5<sup>th</sup> Framework Programme 'Quality of Life and Management of Living Resources'

EC-Project Contract No: QLK5-CT-2001-01401



Title: INNOVATIVE MODELS OF CRITICAL KEY INDICATORS AS PLANNING AND DECISION SUPPORT FOR SUSTAINABLE RURAL DEVELOPMENT AND INTEGRATED CROSS BORDER REGIONAL MANAGEMENT IN FORMER IRON CURTAIN AREAS BASED ON NORTH TO SOUTH EUROPEAN REFERENCE STUDIES



Objective: Development of a methodology leading to standardized tools and procedures for integrated resource evaluation, analysis and management following the principles of sustainable development



# Objectives

## Main objective:

Creation of an operational and integrated comprehensive DSS for optimal water management in borderland regions, in compliance with the WFD

## Sub-objectives:

- Identification of conflicts
- Analysis of legal framework
- Bilateral cooperation & exchange of data

# DESCRIPTION OF THE CURRENT SITUATION

The most important problems in the area can be classified in the following :

- Water quality problems
- Water quantity problems
- Development problems
- Different socio-economic conditions

Water from Nestos river basin is used for :

- agricultural
- urban
- industrial
- recreational
- energy production purposes

## Nestos/Mesta Basin

- Different socio-economic conditions between the two countries
- The political situation with the transition phase to the free market - economy in Bulgaria is still unclear
- No common water management and environmental protection plans have been established
- No joint monitoring systems along the river exist
- Lack of integrated water management & allocation

# EXISTING LEGAL FRAMEWORK

- *2002 "Agreement between the Ministry for the Environment, Physical Planning and Public Works of the Hellenic Republic and the Ministry of the Environment and Water of the republic of Bulgaria on cooperation in the field of environmental protection under the principles of sustainable development "*
- *1995 "Agreement between the Government of The Hellenic Republic and the Government of the Republic of Bulgaria for the waters of river Nestos".*
- *1964 "Agreement on cooperation between the people's Republic of Bulgaria and the Kingdom of Greece concerning the utilization of the waters of the rivers crossing the two countries".*

# The G-B Agreement of 1995

- 29% of the river flow to be received by Greece
- Exchange of information
- Establishment of a cross-border Committee
- Enforcement period: 35 years



# COMPLIANCE WITH THE WFD

## WFD

- River Basin Level
- Economic analysis of water use
- River Basin Management Plan
- Public Participation

## G-B Agreement

- ⇒ Nestos River
- ⇒ No reference
- ⇒ No preparation
- ⇒ Only authorities involved

## The 6 reference areas in the „Iron Curtain“ project



# European Integration – The „Iron Curtain“ Project

## Reference Areas

- PASVIK Area - Norway / Russia
- RHÖN Area - Germany / Germany
- BAVARIAN / BOHEMIAN Forest - Czech Republik / Germany
- TREBON BASIN / WALDVIERTEL Area - Austria / Czech Republik
- KÉKFRANKOS Area - Austria / Hungary
- RIVER NESTOS (MESTA) Basin - Bulgaria / Greece

# PRIORITIES

For the Greek part of the river basin, priority should be given to:

- ✓ the preservation of agricultural development
- ✓ the sufficient functioning of the energy production dams
- ✓ the protection of the delta
- ✓ the enhancement of tourism

# POLICY ACTIONS

- Energy production
- agriculture development

are crucial for the economic development of the area.

# CONCLUSIONS

- Lack of integrated management approach
- Need for common vision, methodologies
- Public Participation
- Conflict Resolution
- Political willingness for cooperation
- Inter-country confidence

# TRABOREMA

6th Framework Programme

“Specific Measures in support of International Cooperation-Western Balkan Countries” (2004-2007)

**Title:** Concepts for integrated transboundary water management and sustainable socio-economic development in the cross border region of Albania, Former Yugoslav Republic of Macedonia (FYROM) and Greece.

# Objectives

- Design and implement an ecological indicator based monitoring system as a basis for the implementation of IWRM in Lake Prespa.
- Adapt and apply suitable modelling and simulation tools as a basis for better assessment of current ecological status and prediction under various scenarios.
- Provide coherent policy recommendations based on qualitative quantitative findings.



## LOCATION OF LAKE

### Countries

Greece/Albania/FYROM

### General location of the basin

South-western part of FYROM

North-western GREECE

East ALBANIA

### Coordinates

Latitude: 40°46' - 41°10' (N)

Longitude: 20°54' - 21°70' (E)



# PHYSICAL DIMENSIONS



Prespa area: 2,519 km<sup>2</sup>

## Macro Prespa

water surface area: 190 km<sup>2</sup> FYR-  
84.8 km<sup>2</sup> GREECE- 38.8 km<sup>2</sup>  
ALBANIA)

## Micro Prespa

water surface area: 43.5 km<sup>2</sup>  
GREECE- 3.9 km<sup>2</sup> ALBANIA)

# Difficulties in Transboundary Cooperation in Prespa

1. Different laws, policies and protected areas systems and powers of management authorities
2. Different political and administrative structure
3. Different stages of economic development and policy
4. Difficult terrain, inaccessibility and lack of transport
5. National, political, or cultural differences - misunderstanding
6. Language barriers

## The objectives of the Prespa Park

1. Conservation of ecological values and functions and of the biological diversity in the Prespa Park area.
2. Enhance opportunities for the sustainable economic and social development of the local societies and the wise use of the natural resources for the benefit of nature, local economies and future generations.
3. Preservation of cultural values such as monuments, traditional settlements and traditional human activities and cultural elements that promote the sustainable management of the natural resources.
4. Seek participation, co-operation and involvement in decision-making and in benefit or loss sharing of stakeholders in the three countries.

# Recommendations

- Creation of an action plan for tourism development in Prespa region.
- Development of an operational water monitoring system based on IT tools to foster sustainable development in Prespa.
- Enhancing education programs on the use of IT tools in the region.

# CONCLUSIONS

- Lack of integrated management approach
- Need for common vision, methodologies
- Public Participation
- Conflict Resolution
- Political willingness for cooperation
- Inter-country confidence

# WHAT CAN BE DONE

- ✓ Effective cooperation based on the principles of good neighborliness and reciprocity
  - ✓ Thorough water mass balance can provide information for the allocation of the water
  - ✓ Amelioration of the infrastructure
  - ✓ Alterations in current agricultural practices (to more sustainable ones)
  - ✓ Plan for ecosystem management
  - ✓ Local actors involvement
- ✓ Need for transboundary integration

# WHAT CAN BE DONE

The improvement of the existing legal framework will enhance current transboundary cooperation. A series of issues will be regulated by the agreement:

- ✓ water protection and use
- ✓ institutional arrangements for transboundary water cooperation
- ✓ management plans
- ✓ harmonization of programs and measures monitoring and research
- ✓ transfer of know-how and technology
- ✓ joint projects



# WHAT CAN BE DONE

- ✓ The creation of an active transboundary steering Committee will facilitate the communication and cooperation between the two countries.
- ✓ The agreements which have emerged from efforts of "hydrodiplomacy" clearly reflect the "good will" of all interested parties to share responsibility,
- ✓ promote basin wide management and multipurpose development.

POLITICAL WILL IS NEEDED FOR  
THE PROMOTION OF  
HYDRODIPLOMACY IN ORDER TO

- STRENGTHEN THE MUTUAL TRUST
- ACHIEVE WELFARE AND  
ECOLOGICAL STABILITY OF  
TRANSBOUNDARY WATER  
RESOURCES.