



A Romanian, Hungarian and Ukrainean transboundary basin: *Somes - Tisa*

dr. eng. Costica Sofronie, dr. eng. Daniela Radulescu
NATIONAL ADMINISTRATION "APELE ROMANE"

**Transboundary Network of Basin Organizations
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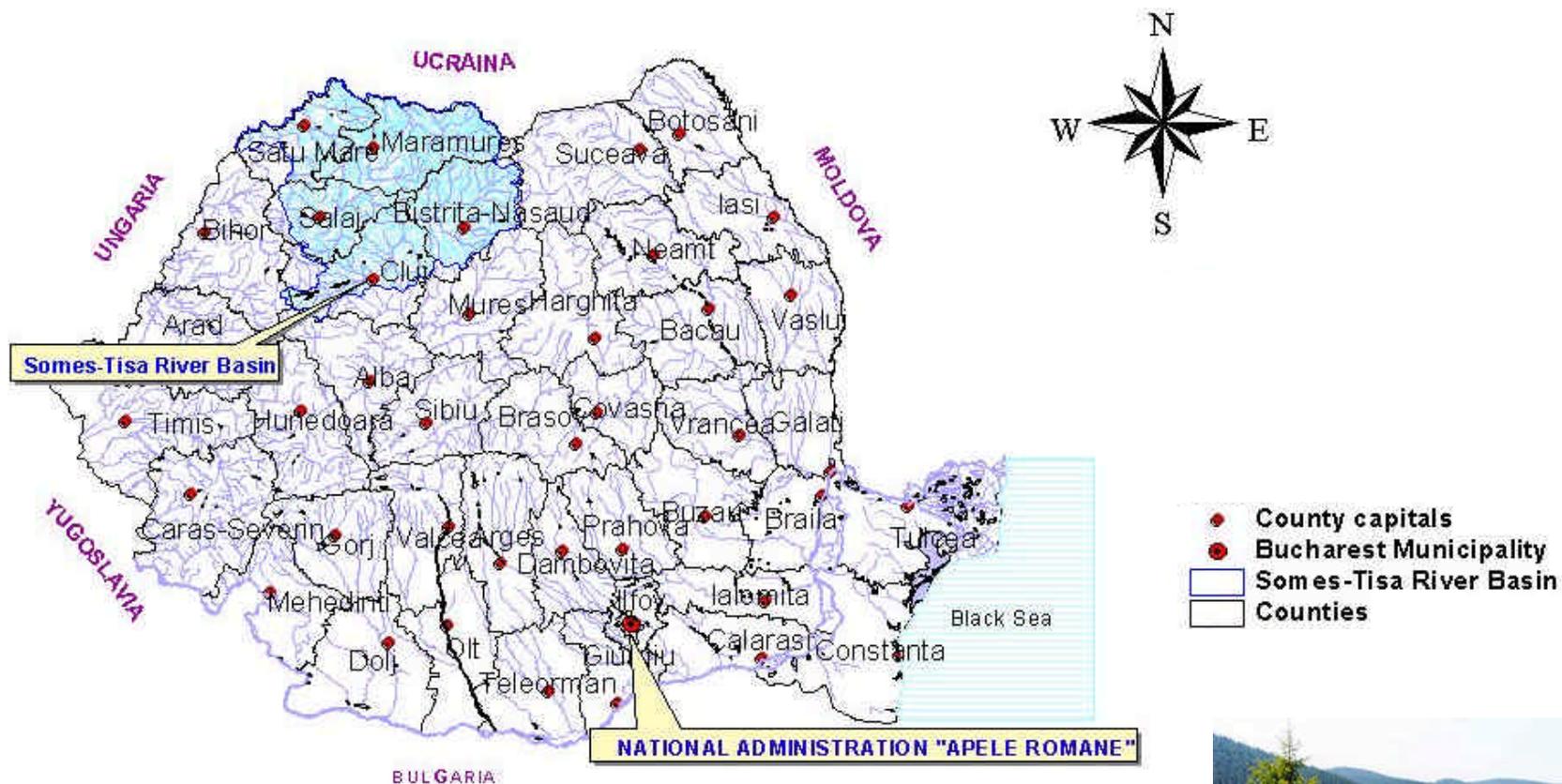
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1. THE ROMANIAN TERRITORY



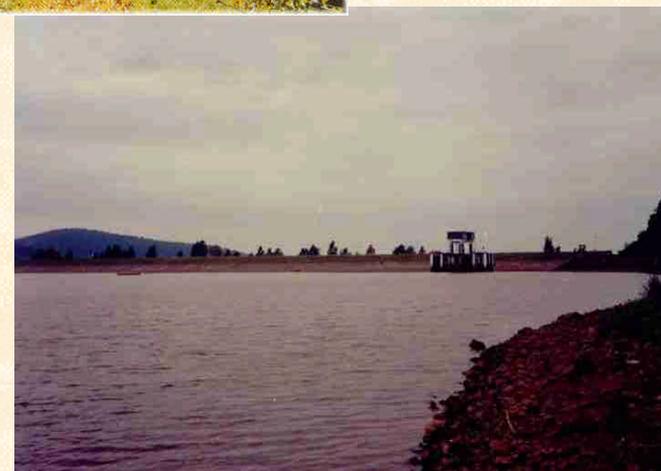
NATIONAL ADMINISTRATION "APELE ROMANE" SOMES-TISA WATER BRANCH



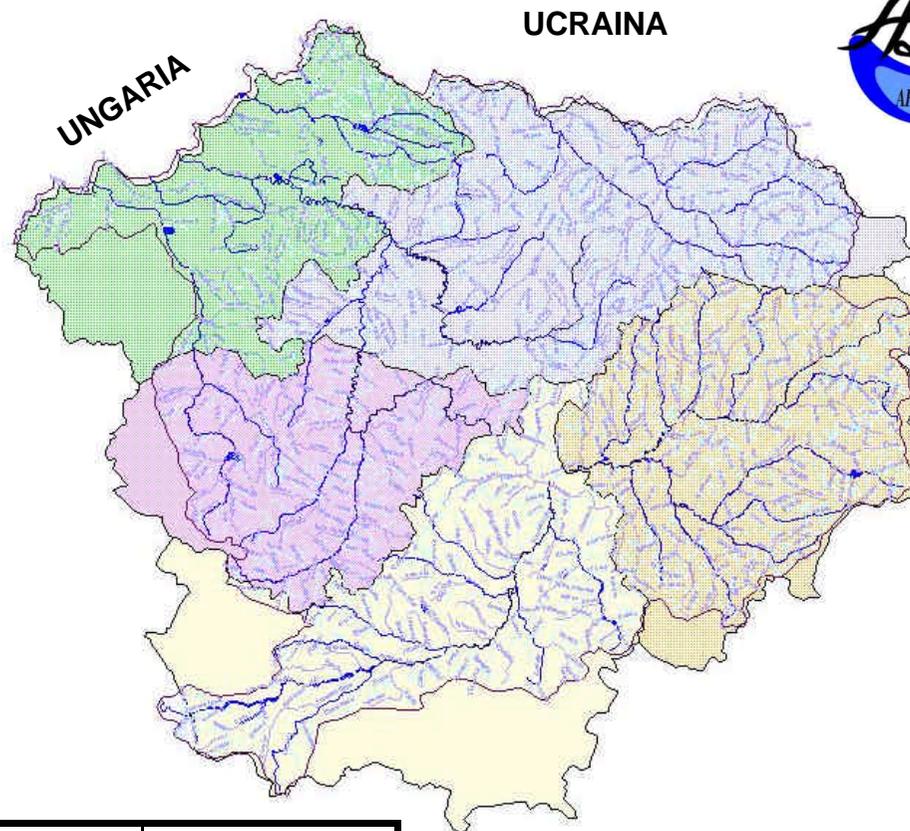
BAZINUL HIDROGRAFIC SOMES-TISA



Suprafața totală în România:	22.380 km ²
Lungime rețea hidrografică:	7.828 km
Lungime râu:	
- Tisa	61 km
- Someș	376 km
- Crasna	134 km
- Tur	68 km
Populație:	2.090.000
Resurse totale de apă:	6.590 mil m ³
- Suprafață:	6.110 mil m ³
- Subteran:	470 mil m ³
Resurse utilizabile de apă:	1.287 mil m ³
- Suprafață:	971 mil m ³
- Subteran:	316 mil m ³
Lacuri de acumulare cu folosință complexă:	10
- Volum total:	202,720 mil m ³
- Volum util:	111,81 mil m ³
Lucrări pentru combaterea inundațiilor:	
- Apărări de maluri:	423 buc / 224,3 km
- Reguplatizări de albișii:	200 buc / 660,5 km
- Indiguiri:	131 / 817,47 km
Obiective apăraute:	
-	250.000 ha teren
-	243 localități
-	722 obiective industriale
-	37.200 case și gospodării
-	212 km căi ferate
-	735 km drumuri
-	419 poduri și podete
Sistemul de monitoring integral al apelor:	
-	95 stații hidrometrice
-	136 posturi pluviometrice
-	253 foraje hidrogeologice
-	68 secțiuni de control a calității apei în flux informațional lent
-	12 secțiuni de control a calității apei în flux informațional rapid
-	864 secțiuni de control a debitului prelevate și restituite de folosință



SOMES-TISA RIVER BASIN CHARACTERISTICS



Area [km ²]	22380
Hydrographic system (length) [km]	7828
Density of hydrographical network [km/km ²]	0.349
Population (inhabitants)	2.090.000
Resources 2002 [hm ³]	1.287
Demands 2002 [hm ³]	325

SOMES-TISA RIVER BASIN WATER RESOURCE SYSTEM



River Basin	Area [km ²]	Hydrographic system (length) [km]	Density of hydrographic network [km/km ²]
Somes	17840	6236	0.349
Tisa	4540	1592	0.356
Total	22380	7828	0.349

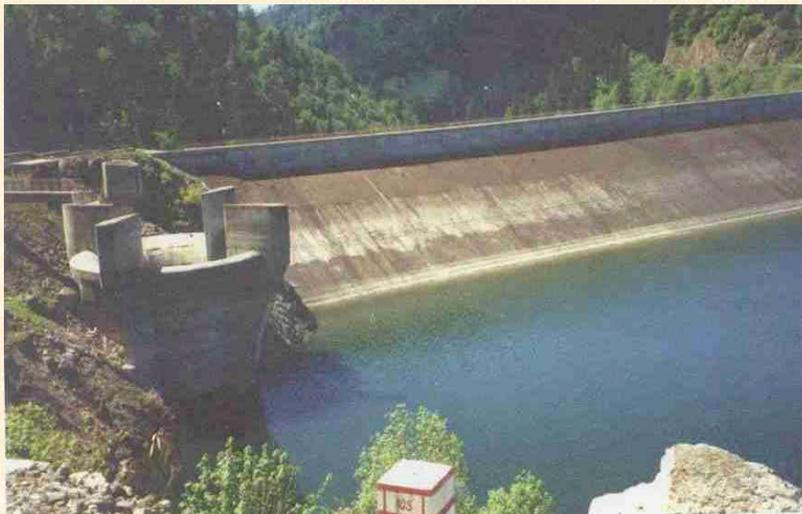
Transborder Rivers of the Somes-Tisa Basin	Length of the river [km]			Area of the Catchment Basin		Q _{med} at the Border [m ³ /s]
	Total Length	On the Romanian Territory	On the Neighbours Territory	On the Romanian Territory [km ²]	On the Romanian Territory [%]	
Tisa	962	61	901	3.237	2,1	aprox. 80,00
Somes	427	376	51	15.740	99,0	125,00
Crasna	180	134	46	1.931	61,0	5,53
Tur	98	68	30	1.144	90,0	9,58



Stramtori Dam



Calinesti-Oas Reservoir



Colibita Dam

River Basin Problems

- *Transboundary waters*

- necessity of common programs /projects

According to the international regulations, the waters leaving the national territory should not have a lesser quality than the waters entering the respective national territory. In order to solve the water pollution issues, the implementation of a **cooperation programme** is necessary. It will include :

- * join water pollution assessments;
- * development of information gathering and information processing systems, concerning the water discharges;
- * overall coordination of the policies and rules in different countries sharing the same hydrographic basin.

- *The most important industry : mining*

- necessity of plans/programs for Preventing and fighting of Accidental Pollution Events with transboundary effect

International Regulations Romania - Hungary

- ***Romanian – Hungarian Convention for the Regulation of the Hydrotechnical Issues concerning the Shared Border Waterbodies*** which leads to:
 - *Operational Rules for the Joint Romanian - Hungarian Hydrotechnical Commission*
 - *Rules concerning the Procedures in case of Unavoidable Dangerous Accidental Pollution Events on the Border Waterbodies*
 - *Rules concerning the Flood Mitigation on the Border Waterbodies*
 - *Rules concerning the Flood Mitigation on the Inner Waterbodies*
 - *Rules concerning the Water Quality Monitoring on the Border Waterbodies or on the Shared Border Waterbodies*
 - *Rules concerning the Meteorological and Hydrological Data Exchange between Romania and Hungary*
 - *Rules concerning the Mutual Disbursements for Water Deliveries and Inner Water Pumping*
 - *Rules concerning the Frontier Crossings and Contacts between the Romanian and Hungarian Hydrotechnical Authorities*
 - *Rules concerning the Information Exchange and Reciprocal Flights for Aerial Observations by Water Management Authorities of Romania and Hungary, in Case of Extreme Flood Imminence on Inner Waterbodies.*

International Regulations Romania - Ukraine

- ***Romanian – Ukrainian Governamental Agreement for Cooperation on Border Waterbodies Management***; Galati, 30.09.1997 / Odessa, 18-21.12.2000 - Government Decision no. 357/11.05.2001 for the approval of the Second Session of the Representatives
 - *Rules for the Romanian – Ukrainian Collaboration in case of Flood Events on the Watercourses and Interior Waters ;*
 - *Rules for the Meteorological and Hydrological Data exchange between Romania and Ukraine ;*
 - *Rules for the Border Waterbodies ;*
 - *Rules for the Procedures in case of Unavoidable Dangerous Accidental Pollution Events on the Border Waterbodies ;*

Existing Joint Projects. Perspectives

- **Existing joint projects**
 - “*Flood Prevention on Upper Tisa*” (PHARE - CBC)
 - “*Tur river Cleaning*” : (PHARE - CBC, supply equipments)
 - “*National Informational-Decisional System for Waterbourne Dezasters Control and Prevention*” (DesWate, supported by USAID)
 - “*Programme concerning the Accidental Pollution Events Prevention and Mitigation System in Somes Basin*” (Norwegian financing).

Central and Eastern European Network of Basin Organizations (CEE NBO)

- **First General Assembly of CEE NBO :**

- 1-2 February 2002 Sinaia, Romania

- **CEE NBO Members :**

- BG, CZ, PL, RO, SB, SL

- **Permanent Observers :**

- HU, SK

- **The Presidency and the Secretariat of CEE NBO are ensured by National Administration *Apele Romane* :**

- President - Mr. Costica Sofronie
- Secretary - Mrs. Daniela Radulescu



The role of CEE NBO in transboundary issues

- **main CEE NBO objectives :**
 - to *promote integrated water resources management at the level of river basins ;*
 - to have *common activities in the region.*
- **The CEE NBO activity program for 2003** favours *the implementation of the WFD in the region.*
 - according to WFD, *the river basin/district represents the main unit for water management.*
- At last CEE NBO meeting (13 November 2002 – **first Liaison Bureau of CEE NBO**, Calimanesti, Romania), we have proposed *the extent of CEE NBO, including Moldavia and Ukraine.*



**Three countries,
one river, one confluence
No Frontier !**

