WATER MANAGEMENT IN ROMANIA

“River Basin Management at the lowest Appropriate Level – When and Why does it (NOT) Work in Practice”

Poland, 22 – 25.05.2005
- 97.4% of Romania's surface is located in the Danube River Basin.
- Romania represents 29% from Danube River Basin surface.
- The Danube River has 37.7% of its length on Romanian territory.
REFERENCE POINTS OF ACTIVITY

• 1924 - The first Water Law which contains provisions referring to measure, register and water management;

• 1956 - Water State Committee – river basins units for water management;

• 1956-2005 River Basin Management Principle was conserved;

• 1956-2005 – Level of organization: Ministry (Water State Committee; National Water Council) – 30 years; Water Department in the structure of other Ministry – 19 years

• 2002 National Administration “Apele Romane” – Executive agency for the implementation of the water management strategy in Romania
THE EVOLUTION OF ROMANIAN WATER MANAGEMENT

CONCEPT

- **I-st Phase**: till 1974 - Quantitative water management – quantitative control for water
  - Water Law - 1924
- **II-nd Phase**: 1974-2000 - Quantitative and qualitative water management - quantitative and qualitative control for water
  - Water Law nr. 8/1974;
  - Law nr. 5/1989;
  - Government Decision nr. 1001/1990;
  - Water Law 107/1996;
- **III-rd**: 2000 - Sustainable water management - quantitative and qualitative control for water and healthy ecosystems
  - Water Framework Directive 2000/60/EC - steps for sustainable water management;
OBJECTIVES AND POLICIES

- Sustainable development of water resources;
- Achievement of “good status” of all waters;
- Obtaining knowledge, preservation and protection of water resources;
- Protection against floods;
- Exploitation and maintenance of water management works;
- Warning the water users and local administration authorities about the water accidental pollution;
- Ensuring the unitary development of infrastructure in water management field through the building of some objectives of national public interest consisting in new water sources and flood protection works;
- Providing water management services according demands;
- Public information, consultation and active participation on water management field.

- **Management policy**: obtaining knowledge and using the water management services;

- **Rehabilitation and development** of the National System of Water Management infrastructure;

- **Financial policy**: applying the economical mechanism;

- **EU accession policy**: implementation of the European Union Directives in the water field;

- **Participatory policy**: River Basin Committees and public participation;

- **Human resources policy**: staff training and specialization;

- **Local policy**: decentralization of the competences.
MINISTERY OF ENVIRONMENT AND WATER MANAGEMENT

- ENVIRONMENT DEPARTMENT
- WATER DEPARTMENT
- INTEGRATION DEPARTMENT

- NATIONAL ADMINISTRATION APELE ROMANE
- ROMANIAN INSTITUTE FOR MARINE RESEARCH
- NATIONAL INSTITUTE FOR DEVELOPMENT AND RESEARCH DANUBE DELTA
There are 11 river basins managed by the National Administration Romanian Waters through its units – Water Directorates.
Organizational structure for the implementation of the Water Framework Directive in Romania
River Basin Committee is made up of the main “actors” from the water management field: state, local communities, water management units, representatives of industry and agriculture, NGO’s.

**BASIN COMMITTEE REPRESENTS THE INTERESTES OF ALL THE PEOPLE**
RIVER BASIN COMMITTEES TASKS

- Collaborate with Water Directorates in the implementation of national water management policies and strategies;

- Agree on plans and schemes related to water management works;

- Approve the river basin management plan;

- Approve the list of protected areas and establish measures for ecological reconstruction;

- Recommend priorities for the financing of sustainable development programs;

- Propose the revision of the water management norms and standards and, if it is necessary, develop quality norms for effluent waters, specific for river basin;

- Inform the public about the organized actions;

- Ensure public debates on all the issues concerning water management;

- Public access to documents and to official meetings.
WATER RESOURCES

- **Water resources of Romania:**

<table>
<thead>
<tr>
<th>Resource category resources</th>
<th>Theoretical</th>
<th>Technically used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>billion m³</td>
<td>billion m³</td>
</tr>
<tr>
<td>Inland Rivers</td>
<td>42</td>
<td>25</td>
</tr>
<tr>
<td>The Danube River</td>
<td>87</td>
<td>30</td>
</tr>
<tr>
<td>Groundwater</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>140</td>
<td>61</td>
</tr>
</tbody>
</table>

- **Romania is relatively poor in water resources - 1870 m³ of water per inhabitant/year**
The features of hydrological regime of water resources:
- Very high variability in space:
  - A big weight of mountains area at runoff forming;
  - Specific average discharge (1-40 l/s*skm);
- Very high variability in time:
  - Important floods during spring, followed by prolonged drought periods;
  - Torrential pronounced regime;

Water quality:
- during 1960-1989, the water quality of inland rivers and Danube river has significantly worsened, but since 1989, the water quality has been improved;
- Eutrophication of lakes, reservoirs and of the Danube Delta and the Black Sea;
- Reduction of the flora and fauna biodiversity;
- Coastal erosion - affects about 127 km (57%) out of the length of the Romanian sea-shore.
EVOLUTION OF THE WATER DEMAND IN ROMANIA

Population
Agriculture
Industry
TOTAL

Volume mld m

THE EVOLUTION OF RIVER WATER QUALITY IN 1989-2003 PERIOD

The chart shows the percentage of river lengths categorized by water quality from 1989 to 2003. The categories are poor, moderate, good, and very good. The data indicates a general improvement in water quality over the years, with a noticeable increase in the percentage of rivers classified as very good.
## CHARACTERISATION OF GROUNDWATER BODIES

<table>
<thead>
<tr>
<th>Water directorates</th>
<th>Total number of groundwater bodies</th>
<th>Number of groundwater bodies at risk</th>
<th>Number of transboundary groundwater bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOMEŞ-TISA W.D.</td>
<td>14</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>CRIŞURI W.D.</td>
<td>8</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>MUREŞ W.D.</td>
<td>24</td>
<td>1</td>
<td>2</td>
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<tr>
<td>BANAT W.D.</td>
<td>18</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>JIU W.D.</td>
<td>6</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>OLT W.D.</td>
<td>13</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>ARGEŞ-VEDEA W.D.</td>
<td>13</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>IALOMIŢA-BUZĂU W.D.</td>
<td>16</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>SIRET W.D.</td>
<td>6</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>PRUT W.D.</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>DOBROGEA-LITORAL W.D.</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>129</strong></td>
<td><strong>20</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>
Established according to the Water Framework Directive and based on:

- Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such;
- Equal access rights to water resources for all users;
- User pays for water services;
- Polluter pays;
- Bonuses to water users which constantly prove a special care for water rational use and quality protection of water;

Providing the specific services of water management, considering the double quality of water as natural resource essential for life and as resource producing economical values.

Contributions:

- water resources use;
- receiving waste water in water resources;
- hydropower capacity from ANAR dams reservoirs;
- gravel extraction from beds and river banks;

Penalties - according to the pollutants toxicity;

Bonuses: 10% from the contributions annual amount.
THANK YOU FOR YOUR ATTENTION!